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IDENTIFIERS Mountain Plains Program

ABSTRACT

One of five supplements which accompany chapter three of "Mountain-Plains Handbook: The Design and Operation of a Residential, Family Oriented Career Education Model" (CE 014 630), this document contains specific information concerning the curriculum component of the research services division. The curriculum products are listed by curriculum area job titles, course titles, number of units, and number of Learning Activity Packages (LAPS). The procedural guide covering the curriculum monitoring form and production flow system is presented, and the instructor data reporting procedures are delineated. A large portion of the document consists of general curriculum guidelines with related forms and charts. (A sample curriculum unit (CE 014 647) and an orientation guide for instructors (CE 014 652) are available from ERIC. Additional Mountain-Plains curriculum materials, including twenty-two instructional units, are available for on-site inspection at the Research Library at the National Center for Research in Vocational Education at Ohio State University.) (BM)

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****

NATIONAL EDUCATION R&D MODEL

MOUNTAIN PLAINS EDUCATION ECONOMIC DEVELOPMENT PROGRAM INC.

ED150354

MOUNTAIN-PLAINS HANDBOOK

THE DESIGN AND OPERATION OF A RESIDENTIAL FAMILY BASED EDUCATION PROGRAM

U.S. DEPARTMENT OF HEALTH
EDUCATION & WELFARE
NATIONAL INSTITUTE OF
EDUCATION

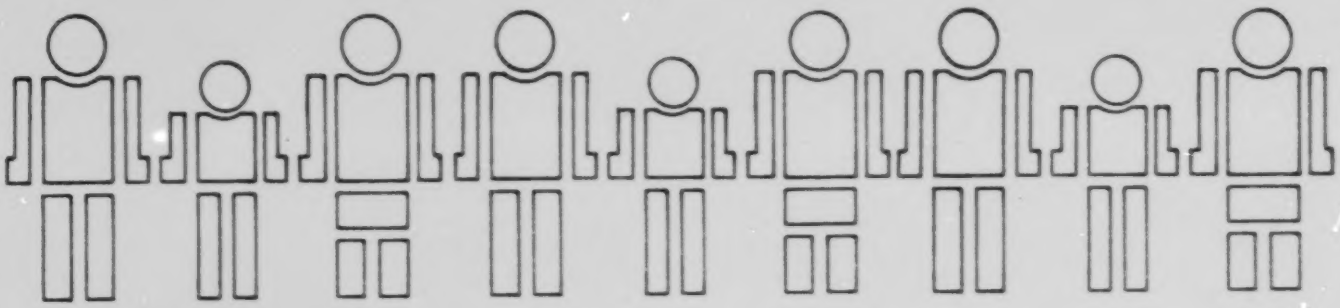
APPENDIX

SUPPLEMENT
NO. 3
TO VOLUME
3

MEASUREMENT
AND
EVALUATION:

RESEARCH
SERVICES
DIVISION

CE014637



APPENDIX

This supplement is designed for use in conjunction with Volume III.

Supplement 3 To Volume III

MEASUREMENT AND EVALUATION: THE RESEARCH SERVICES DIVISION

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MOUNTAIN-PLAINS DOCUMENTATION

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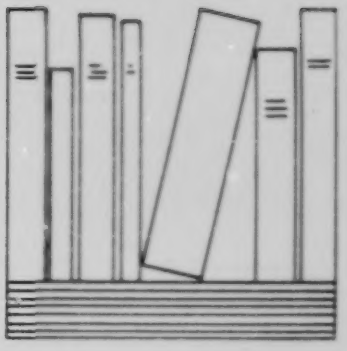
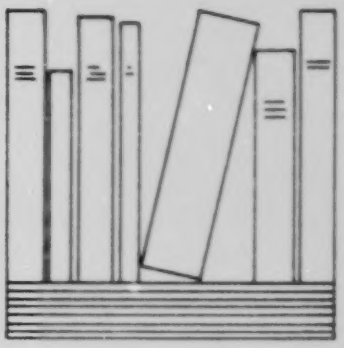
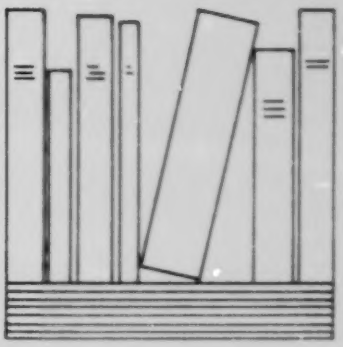


RESEARCH SERVICES DIVISION

CURRICULUM COMPONENT





CA 24: Office Education

Bookkeeper
Keypunch Operator
Clerk-Typist
Clerk
Clerk Stenographer
Accounting Clerk

CA 25: Lodging Services

Maid
Supervisory Housekeeper
Desk Clerk
Night Auditor
Assistant Manager Trainee

CA 26: Food Services

Restaurant Cook
Institutional Cook
Kitchen Supervisor Trainee
Second Baker
Bakery Manager Trainee
Restaurant Manager Trainee
Chef Trainee

CA 27: Marketing & Distribution

Mid-Management Trainee
Checker-Cashier
Professional Salesperson
General Salesperson
Shipping & Receiving Clerk

CA 37: Automotive

Transmission Mechanic
Engine Rebuilder
Light Duty Mechanic
Engine/Transmission Repairman
General Mechanic
Tune-Up and Engine Repairman
Brake and Front-End Mechanic
Tune-Up/Auto Air Conditioning Repairman

CA 38: Small Engines

Small Engine Mechanic

In the following Curriculum Areas, the Job Title and the title of the Curriculum Area are the same:

CA 70: Carpenter

CA 71: Electronics Assembler

CA 72: Electrical Wireman

CA 73: Plumber

CA 74: Heating Systems Serviceman

CA 75: Refrigeration/Cooling Systems Serviceman

CA 76: Appliance Serviceman

CA 77: Radio & Television Serviceman

CA 7o: Electric Motor Repairman

CA 79: Draftsman

The areas listed below are not Job Titles but are those areas that comprise the Foundation Education Program and ancillary services.

CA 11: Mathematics Skills

CA 15: Communication Skills

CA 46: Career Guidance *

CA 47: World of Work *

CA 51: Health Education

CA 61: Consumer Education

CA 63: Home Management

CA 66: Parent Involvement

CA 81: Leadership Training *

* ancillary services

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MOUNTAIN-PLAINS CURRICULUM

COMPILATION OF CURRICULUM AREAS BY COURSE TITLES, NUMBER OF UNITS AND NUMBER OF LAPS WITH SUBTOTALS, TOTALS AND GRAND TOTAL

March, 1975

SUMMARY:	GROSS LAPS	NET LAPS	# OF UNITS
CA 11: Mathematics Skills	402	402	41
CA 15: Basic Communicaton Skills	51	51	0
CA 15: Advanced Communication Skills	40	40	0
CA 24: Office Education	293	293	54
CA 25: Lodging Services	82	82	15
CA 26: Food Services	40	37	7
CA 27: Marketing & Distribution	135	135	32
CA 36: Welding Support	32	32	9
CA 37: Automotive	276	276	65
CA 38: Small Engines	160	160	41
CA 46: Career Guidance	19	19	8
CA 47: World of Work	7	7	1
CA 51: Health Education	36	36	6
CA 61: Consumer Education	21	21	7
CA 63: Home Management	16	16	5
CA 66: Parent Involvement	46	46	30
CA 70: Carpenter	128	128	12
CA 71: Electronics Assembler	72	72	12
CA 72: Electrical Wireman	56	56	9
CA 73: Plumber	75	67	9
CA 74: Heating Systems Serviceman	33	33	3
CA 75: Refrigeration/Cooling Systems Serviceman	27	26	6
CA 76: Appliance Serviceman	69	69	13
CA 77: Radio & Television Serviceman	233	233	34
CA 78: Electric Motor Repairman	44	44	8
CA 79: Draftsman	212	212	15
CA 81: Leadership Training Workshop	33	33	8
Total	2638	2626	450

COURSE TITLES:	# OF UNITS	# OF LAPS
CA 11: Mathematics Skills		
Numeration-Place Value	8	63
Addition-Subtraction	8	65
Multiplication-Division	6	52
Geometry-Measurement	7	61
Algebra	12	161
Total	41	402
CA 15: Basic Communication Skills		
E	5	5
F	5	10
G	5	7
H	5	10
I	5	10
J	5	9
Total	30	51
CA 15: Advanced Communication Skills		
K	5	11
L	5	8
M	5	8
N	5	7
O	5	6
Total	25	40
CA 24: Office Education		
Accounting	7	36
Business Writing	2	17
Ten Key Adding Machine	2	7
Printing Calculator	2	8
Electronic Calculator	4	26
Data Processing	5	15
Filing	1	4
Key Punch	4	18
Full Keyboard Adding Machine	2	9
Beginning Shorthand	2	39
Shorthand Transcription	3	12
Keyboard Typing	4	21
Production Typing	6	43
Machine Transcription	5	19
Modern Office Procedures	5	19
Total	54	293

COURSE TITLES:		# OF UNITS	# OF LAPS
CA 25: Lodging Services			
Housekeeping Operations		7	30
Front Desk Procedures		4	31
Night Auditing Procedures		4	21
	Total	15	82
CA 26: Food Services			
Kitchen Helper		2	8
Short Order Cook		1	6
Restaurant/Institutional Cook		1	8
Restaurant Manager		1	4
Chef Trainee		1	4 *
Second Baker		1	10 **
	Total	7	40
CA 27: Marketing & Distribution			
Marketing Operation		3	8
Merchandise Distribution Procedures		3	13
Human Relations in Marketing		2	8
Marketing Mathematics		2	6
Cash Register Operation		3	11
Visual Merchandising		1	5
Basic Salesmanship		2	12
Customer Services		2	7
Advanced Salesmanship		4	15
Advertising & Promotion		2	9
Purchasing		2	15
Business Finance Control		3	13
Supervisory Skills		3	13
	Total	32	135
CA 36: Welding Support			
Gas Welding		4	15
Arc Welding		5	17
	Total	9	32

* 2 LAPs are used from 26.04.01 (Restaurant Manager)
** 1 LAP is used from 26.03.01 (Restaurant/Institutional Cook)

COURSE TITLES:		# OF UNITS	# OF LAPS
CA 37: Automotive			
Automotive Shop Safety		1	4
Tools and Equipment		3	9
Brake Systems		7	22
Suspension Systems		6	24
Electrical Systems		6	24
Automotive Fuel Systems		6	23
Emission Systems		2	13
Tune Up		5	18
Engine Repair		7	30
Transmissions		8	68
Auto Air Conditioning		7	21
Parts & Accessories		3	10
Detailing & Servicing		4	10
	Total	65	276
CA 38: Small Engines			
Basic Small Engines		21	112
Chainsaw		5	7
Snowmobile		5	15
Motorcycles		5	12
Outboard Engines		5	14
	Total	41	160
CA 46: Career Guidance			
Awareness		5	11
Exploration		3	8
	Total	8	19
CA 47: World of Work			
World of Work	Total	1	7
CA 51: Health Education			
Introduction to Health Education		2	17
Family Health		4	19
	Total	6	36

COURSE TITLES:		# OF UNITS	# OF LABS
CA 61: Consumer Education	Total	7	21
CA 63: Home Management	Total	5	16
CA 66: Parent Involvement			
Interaction With Children		2	6
Infant & Toddler		3	10
Preschool Child		3	13
Middle Age Child		2	12
Adolescence		2	5
	Total	30	46
CA 70: Carpenter			
Rough-In		4	72
Finish		5	48
General Procedures & Practices For Building Trades & Services		3	8 *
	Total	12	128
CA 71: Electronics Assembler			
Preparation for Electronics Assembly		6	58
Electronic Assembly		6	14
	Total	12	72
CA 72: Electrical Wireman			
Electrical Wiring Rough-In		4	30
Electrical Wiring Trim-Out		5	26
	Total	9	56
CA 73: Plumber			
Drainage & Vent Systems		2	28
Supply Piping Systems		4	39
General Procedures and Practices for Building Trades & Services		3	8 **
	Total	9	75

* See Plumber (CA 73)
** Same as 70.03 (see Carpenter: CA 70)

COURSE TITLES:		# OF UNITS	# OF LAPS
CA 74: Heating Systems Serviceman			
Heating Systems and Servicing	Total	3	33
CA 75: Refrigeration/Cooling Systems Serviceman			
Refrigeration/Cooling Systems Serviceman	Total	6	27 *
CA 76: Appliance Serviceman			
Heater Type Appliances		6	29
Motor Operated Appliances		7	40
	Total	13	69
CA 77: Radio & Television Serviceman			
D.C. Circuits		10	38
A.C. Circuits		8	26
Basic Radio Theory & Component Assembly		7	39
Television Repair		9	130
	Total	34	233
CA 78: Electric Motor Repairman			
Electric Motor Repairman	Total	8	44
CA 79: Draftsman			
Basic Drawing		11	88
Blueprint Reading		4	124 **
	Total	15	212
CA 81: Leadership Training Workshop			
Leadership Training Workshop		3	18
Leadership Training Workshop II		5	15
	Total	8	33

* One LAP "Remote Mounted Thermostat" is the same as 74.01.02.15.
** Support only to Building Trades & Services

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MOUNTAIN-PLAINS CURRICULUM MONITORING FORM CD-2

January 1975

Teacher _____ Test Site # _____

Date _____ Grade Level _____ CA # _____ Other _____

QUESTIONS	RESPONSES Yes	No
1. Are raw test scores logged on SPRs? Criterion: On a test sample of 10, 9 scores are logged. Job title level pre and post test scores are entered by the test center. Unit post and performance test scores are entered by the instructor. LAP test scores are entered by the student on answer sheets. Job title post test scores are entered on the SWP by the test center.		
2. Are prevalidation procedures being followed? Criterion: SPRs contain prevalidation entry marks which match those on SWPs. No students are found involuntarily using LAPs that are marked on SPR as having been prevalidated. (Students may work in prevalidated LAPs when this is review following failure on performance test.)		
3. Are students using LEGs? Criterion: 9 out of 10 randomly selected students can describe a LEG and report that they are using them.		
4. Are students using LAPs? Criterion: 9 out of 10 randomly selected students can relate their activities to a procedure on a specific LAP.		
5. Are students using LAPs as prescribed? Criterion: 9 out of 10 students observed proceed from one LAP to the next without instructor interaction, except where by necessity student tasks are not ordered the same as LAPs.		

QUESTIONS	RESPONSES Yes	No
6. Does instructor-student interaction conform to M-P curriculum design? Criterion: Over a one hour observation period, a maximum of 5 minutes is spent interacting with all students at once.		
7. Is instructor available as a resource person? Criterion: 8 out of 10 randomly selected students report instructor is available to help them when needed within a reasonable length of time.		
8. Are LAP tests properly used? Criterion: Observation and/or student report indicates students are taking and scoring LAP tests themselves.		
9. Are Unit tests properly used? Criterion: All observed instances show performance tests administered before scoring of written tests. All observed instances indicate that instructor is conducting both cognitive and performance tests in a manner which compels students to respond to test items without benefit of external information other than that prescribed by testing constraints.		
10. Is test data being properly collected? Criterion: Written Unit test answer sheets attached to performance tests; both tests given at the same time; LAP test answer sheets properly stored; course test answer sheets properly labeled as to pre and post; and all answer sheets collected and stored and have required information on them.		
11. Is the instructor observing all the guidelines for use of the SWP? Criterion: The key to SWP use is observed to be used in filling out the SWP. Data is recorded as a LAP (or unit if this is the smallest component required of that job title) is completed. Other information required by the form is entered in appropriate spaces.		

QUESTIONS	RESPONSES Yes	No
12. Is the Student Progress Record being used as designed? Criterion: Students or instructional staff fill out identifying information completely, accurately and neatly. Students fill in the first three columns as required. Instructor initials the appropriate column at the termination of a learning segment, indicating accurate and timely conformity to instructions by students.		
13. Are Curriculum Materials appropriately stored and used by students? Criterion: LAPs, LEGs and resource materials are kept in a place which is accessible to students.		
TOTAL	/13	

APPENDIX B 2

CURRICULUM PRODUCTION FLOW SYSTEM

April, 1975

1. Under Curriculum Department supervision, the instructor writes curriculum (LAPs, LEGs, tests, resource lists, etc.) in his instructional field using appropriate Worksheet Forms (A).

2. These products, in rough draft form, are sent to the Curriculum Department.

3. Upon arrival, they are received and logged in by the Curriculum Secretary.

4. The logging in process consists of:

   a. attaching a Routing Slip for Curriculum Products (B) to each piece of curriculum, filling in the necessary information. That is, author's name, department, title, file code number, kind of product (LAP, LEG, etc.), receiving date and suspense date (that date on which the material is to be sent on to the next department involved in the curriculum development production flow system).

   b. completing a File Code Card (C) which identifies the material by file code number and type and is stamped with the Curriculum Department suspense date. This card is filed in an IN HOUSE BOX and kept within the department as a record of each piece of material as it moves through the production flow system. (The IN HOUSE BOX is, as the name applies, used for cards on products which are being processed within the Curriculum Department).

5. The Curriculum Secretary then routes the product to the Curriculum Editor. If necessary, the editor then routes it to the Curriculum Analysts for further analysis.

6. If, at this point, a determination is made that the product needs revision or rewriting for any reason, the originator is contacted; a conference is set up for discussion and decisions concerning major or complex changes. Those only requiring minor or non-complex changes are returned to the originator with notations. Routing is done through the Curriculum Secretary.

7. Upon approval by the Curriculum Department (editor or analysts) denoted by their initials on the Routing Slip, the product is returned to the Curriculum Secretary for further routing.

8. The Secretary stamps the Routing Slip with the suspense date for the Word Processing Center, retrieves the file card from the IN HOUSE BOX, stamps it with the same suspense date, refiles it in the WORD PROCESSING BOX, lists the file code numbers of the material in a log that is used as a double-check on production and as a source from which the Weekly Status Report (D) is compiled, fills out and attaches a Reproduction Job Ticket(E), and sends the material to the Word Processing Center.

9. When Word Processing completes the master copies, the Routing Slip is initialed and the material is routed to the Print Shop.

10. When Reprographics has completed the printing of the specified number of copies for the Instructional Area plus copies for the Curriculum Department, the Routing Slip is again initialed by Reprographics and the original, copies, and Routing Slip are sent to the Curriculum Editor.

11. The Curriculum Editor files the original in the Master Files (files for master copies for further reproduction), holds the Instructional Areas' printed copies until the next release date for curriculum materials, routes printed copies to the Curriculum Analysts for their sets of books of curriculum products, and sends the routing slip to the Curriculum Secretary.

12. The Curriculum Secretary fills in the date of publishing in the Routing Slip and files it*, pulls the file card from the WORD PROCESSING BOX, and crosses out the file code number in the double-check log.

13. If the originator (instructor) wishes to revise or make any changes in a product that has been printed, he sends the product, with a Change Form (F) attached, to the Curriculum Editor who makes an initial determination whether the change constitutes a major revision or a minor correction.

14. If the change appears to constitute a major revision, the product with the Change Form attached is routed to the Senior Curriculum Specialist for review and recommendations. The product is returned to the Curriculum Editor who, if the change is approved, files the Change Form and sends the product to be changed to the Curriculum Secretary for routing through the production flow system. If the change is disapproved, the editor files both the Change Form and the material, notifying the instructor of its disposition and the reason.

15. If the change constitutes a minor correction, the Curriculum Editor effects the change in the original in the Master Files so that it will appear in the next printing.

* The information on the Routing Slip was originally used to keypunch cards for all curriculum products for a printout. It was eventually felt that time spent on key-punching was disproportionately excessive compared with benefits to the corporation and, as a departmental function, was suspended.

EXHIBITS:
- A Worksheet Forms
- B Routing Slip
- C File Code Card
- D Weekly Status Report
- E Reproduction Job Ticket
- F Change Form

A

Author(s): _____ File Code: _____

LEARNING ACTIVITY PACKAGE (WORKSHEET)
(LAP)

CURRICULUM AREA: _____

COURSE: _____

UNIT: _____

PERFORMANCE ACTIVITY: _____

OBJECTIVE:

EVALUATION PROCEDURE:

RESOURCES:

PROCEDURE:

STEPS *KEY POINTS (OPTIONAL)*

A

(WORKSHEET) File Code _____

LEARNING EXPERIENCE GUIDE
(LEG)

CURRICULUM AREA TITLE: _____

COURSE TITLE: _____

UNIT TITLE: _____

AUTHOR(S): _____

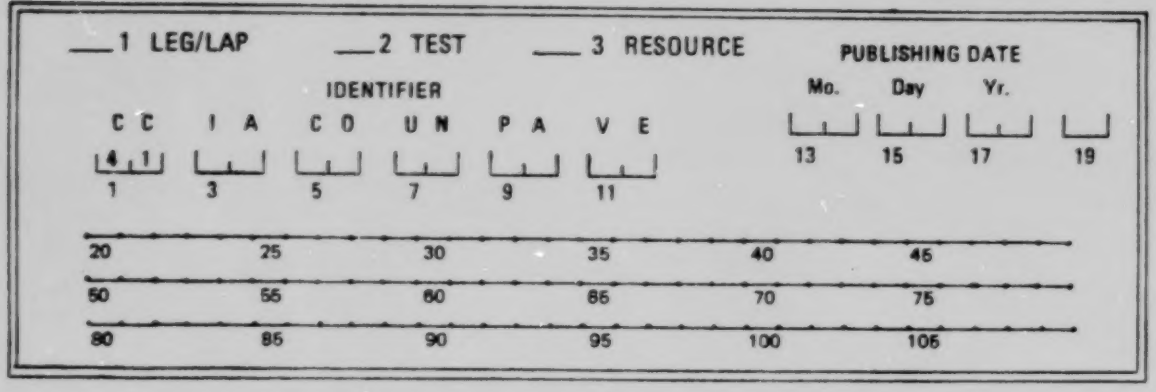
B

Routing Slip
Curriculum Products

AUTHOR _____

PHONE _____

ORIGINATING DEPARTMENT _____ BUILDING NUMBER _____


1 LEG/LAP
2 TEST
3 RESOURCE
PUBLISHING DATE
Mo. Day Yr.
IDENTIFIER
C C I A C O U N P A V E
4 1
1 3 5 7 9 11
13 15 17 19
20 25 30 35 40 45
50 55 60 65 70 75
80 85 90 95 100 105

ROUTING STEPS	RECEIVING DEPARTMENT	RECEIVING DATE	Completed by (Initials)	SUSPENSE DATE
1.	CURRICULUM			
2.	ORIGINATOR			
3.	CURRICULUM			
	Approved for production by: _____			
4.	WORD PROCESSING *(If further commentary with Curriculum is needed, note reason: i.e., not legible, unclear, etc.)* Comments:			
	Proofread by: _____			
5.	REPRODUCTION: Send master and _____ copies to the originator. Send 2 copies and this form to curriculum. COST CENTER			

COMMENTS:

Consolidated

WEEKLY CURRICULUM STATUS REPORT

18

March 18, 1974

Submitted By:

David A. Coyle
Director of Research Services

Robert G. England
Senior Curriculum Specialist

March 18, 1974 CURRICULUM AREA COMPREHENSIVE REPORT

Curriculum Area	LAPS						UNITS COMPLETE WITH LEGS & LAPS				COURSES COMPLETE WITH LEGS & UNITS				Comprehensive Test		
	Projected PAs	LAPs in Draft Form	LAPs Printed	Total LAPs Drafted and Printed	LAPs Deficient	Percent of LAPs Completed	Projected Units	Total Units Drafted/Printed	Units Deficient	Percent of Units Completed	Projected Courses	Total Courses Drafted/ Printed	Courses Deficient	Percent of Courses Completed	Comprehensive Test Deficient	Comprehensive Test Drafted	Comprehensive Test Printed & Complete
11 Math Skills	412	0	412	412	0	100	41	41	0	100	5	5	0	100			X
15 Comm Skills	364	0	363	364	0	100	89	89	0	100	18	18	0	100			X
24 Office Ed	347	0	347	347	0	100	76	76	0	100	20	20	0	100			X
25 Lodging	82	0	82	82	0	100	15	15	0	100	3	3	0	100			X
26 Food Svs	270	0	270	270	0	100	26	26	0	100	2	2	0	100			X
27 Mktg/Dist	161	0	161	161	0	100	34	34	0	100	13	13	0	100			X
29 Bldg Const	286	1	285	286	0	100	32	0	32	0	7	0	7	0			X
30 Electric	531	0	531	531	0	100	76	0	76	0	11	0	11	0	X		
31 Plumb	80	0	80	80	0	100	12	0	12	0	2	0	2	0			X
32 Refri	87	4	83	87	0	100	5	5	0	100	2	2	0	100			X
33 Heating & Air Cond	71	12	59	71	0	100	9	0	9	0	2	0	2	0	X		
34 Drafting	219	0	219	219	0	100	15	15	0	100	2	2	0	2			X
36 Welding	35	0	35	35	0	100	11	11	0	100	2	2	0	100			X
37 Automotive	282	0	282	282	0	100	69	69	0	100	13	13	0	100			X
38 Sm Engine	198	0	198	198	0	100	43	43	0	100	5	5	0	100			X
6 Career Guid																	
1 Health Ed																	
1 Health Ed FCC	45	0	45	45	0	100	6	6	0	100	2	2	0	100			X
1 Cons Ed																	
1 Cons Ed FCC	16	8	8	16	0	100	6	6	0	100	1	0	1	0			X
2 Home & Pers Mgmt																	
3 Home Mgmt FCC	14	2	12	14	0	100	4	4	0	100	2	2	0	100			X
0 Prt Invmt FCC	19	0	19	19	0	100	6	6	0	100	1	1	0	100			X
0 Counseling																	
TOTAL	3519	27	3492	3519	0	100	575	446	129	78	113	90	23	80			

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MEMORANDUM

DATE October 25, 1974

TO Dave Coyle

FROM Bob England

SUBJECT Production Schedule Comments

COPY TO

I. Finished and Released

24 Office Ed
25 Lodging
27 Marketing & Distribution (being held here pending return of instructor November 4)
36 Welding
37 Automotive
51 Health Ed

II. Finished

26 Food Services
70 Carpenter
71 Electronics Assembler
72 Electrical Wireman
73 Plumber
74 Heating
77 Radio & TV Serviceman
79 Draftsman

III. On Schedule

61 Consumer Ed
66 Parent Involvement
Leadership Training
Career Guidance
15 Communication Skills

IV. Problem Areas

38 Small Engines - Deficient SPR
63 Home Management - 1 LAP, 4 Cog Tests behind
76 Appliance Repairman - STPOs
75 Refrigeration - Cog Tests
78 Electric Motor Repairman - 1 LAP, 1 Unit, 1 LEG and 1 Test behind.

Reasons for deficiencies are apt to be found appended to production schedules.

F

Mountain-Plains Education & Economic Development Program, Inc.

CURRICULUM CHANGE ROUTING FORM

TYPE OF CHANGE: **DATE** _____

CHANGE CATEGORY (Check One)

COURSE	___	LEG	___
UNIT	___	TEST	___
LAP	___	MATRIX	___
SWP	___	STPO	___
SPR	___	OTHER	___

___ NEW
___ REPLACEMENT
___ ALTERNATE
___ OTHER

ORIGINATOR

_____
TITLE - CURRICULUM AREA

1. **Identify proposed change in detail:** *(Attach supporting information; curriculum number, example, etc.)*

2. **State reason for request, including substantiating data:**

3. **How will proposed change meet the needs identified in 2 above?**

ACTION AND RECOMMENDATIONS:

RESEARCH SERVICES/CURRICULUM _____

_____

EDUCATIONAL SERVICES DIVISION: _____

_____

FINAL DISPOSITION: _____

_____

ED FORM 121-2-71

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INSTRUCTOR DATA REPORTING PROCEDURES

Introduction

This document has been compiled from a variety of sources, edited for clarity and brevity, and is being made available for reference use by instructors and others in need of information necessary to understand and implement the Mountain-Plains instructional and evaluation system. There are many facets of the Mountain-Plains Learning System, some of which are not included here. Included herein are:

1. Descriptions of the several forms used for student accounting, student progress monitoring, program evaluation and ancillary data reported for corporate purposes.
2. Explanations of how these forms relate to other segments of the system.
3. Detailed procedural instructions to those who will be using the system.

Accurate use of the documents described herein is essential in data processing, analysis and feedback, both to instructional staff and management. This feedback feature is of major importance in providing for sensitive monitoring of both the system to identify and react to operating costs (broken down in detail), fluctuating student numbers, staff/student ratios, average length of various career programs, performance distributions (learning curves) of aggregated students within career areas, projections of individual exit dates and the apparent needs of individual students based on relative rate of progress.

In summary, the documents described herein allow for:

1. Student attendance accountability.
2. Adjustment of class load.
3. Student job title and length of program identification and possible adjustment.
4. Time norming of curriculum elements - important for marketing and replication.
5. Identification of potential problems with regard to specific curriculum elements.
6. Immediate awareness of a variety of student problems (i.e., scheduled versus attended time, etc.).
7. Identification of student exit and adjustment of entrance schedules.
8. Identification of student progress or lack thereof in curriculum area.
9. A form of internal program evaluation by component - cost, time, success rate, etc.
10. Relation to a variety of substantiating documents which are used to report a number of variances.

This manual should not be viewed as static. Refinements may occur within allowable limits imposed by our stable operating mode over time. Such refinements will be issued as amendments to this manual which, once again, has the major purpose of specifying data reporting responsibilities of instructional and other staff.

STUDENT TIME CARD

Description and Purpose

The Time Card is issued initially by the Data Center/Student Accounting, one to each student, for the purpose of keeping track of his scheduled time as established by the Scheduling Office in the Data Center. Examples of scheduled time are: class time, MOWINDS Council Involvement, Test Center, GED testing, incentive leave, etc. Examples of filled out and blank student time cards are appended.

The card contains two parts. The left side, and larger half, is for instructors, counselors, etc., to "stamp off" authorized time. The right side is for the use of the Data Center to record variances identified from the data contained on the left side. This information is sent to Butte, where it is used to adjust Student Scheduled Time and Attended Hours columns on the Data Printout.

The total time on the time card assigning students to specific activities appears as scheduled time for those activities on the Data Printout. That time which is stamped by instructors is entered as attended time. The difference between the two appears on the printout as variance time. Each variance is coded and reflected under, for example, "sick hours" on the printout.

Students are normally paid $85 per week. The time card determines whether the student is paid the full amount or not. If the coded absence without a stamp mark indicates that the student is absent for other than authorized reasons, the pay clerk reduces the amount the student receives.

In order for a student to be excused from an absence, he must first place a call to the Data Center. Exceptions: only heads of household and single heads of household must call in this information. Spouses do not have to. However, spouses are accountable in part for their attendance, i.e., spouses must:

1. Be present 75% of the time as reflected by their time cards, or they may be dropped from an occupational area.
2. Be present and accountable on the usual basis for counseling and Family Core Curriculum time.

How the Student Time Card Fits into the System

This document provides the basis for the student accounting system. The cards are prepared by the Scheduling Department, computerized, and are computer printed weekly in Butte.

Student Accounting gets the printout time cards from the Data Center and issues them to the students at the pay line, where they surrender the old time card.

Students carry the card with them, and get stamped off when and where they are scheduled to be.

By way of final disposition, the cards are filed weekly in the Data Center in special files for time cards only.

Specific Procedure for Instructors

Instructors are charged with the responsibility of stamping (or attesting the student's presence in) the appropriate mod on the time card.

To assure that this "stamp off" procedure occurs in accord with regulations, several monitoring devices will be employed:

1. Instructional areas will be periodically audited to determine the actual number of students present at a given time.
2. Instructional areas will be monitored to determine the effectiveness of curriculum products. An account of numbers of students occurs again at these times.
3. Other student accounting information sources (Student Attendance Rosters) have become available, so that student accounting data may now be derived from a variety of sources and compared.

The obvious implication is that instructors must exercise caution in their stamping procedures in order that other reporting systems are not contaminated by data which is not accurate, and that students receive the amount of money to which they are entitled.

1. Do not take this document lightly. After all - it is the basic instrument of the student accounting system.
2. Do not overstamp unless you are a counselor, career guidance person, student advisor, or are involved with scheduled student personal development activities. Other activities (such as parent/teacher conferences) also occur for which staff have been specifically authorized to overstamp. These are known to the authorized personnel.
3. Be sure you have your personal stamp with both the curriculum area number and your initials. A curriculum area stamp alone is not sufficient. It is necessary for purposes of Student Accounting, Cost Accounting and the control of other variables, that each mod (or partial mod) be stamped by specific Curriculum Area number rather than, for instance, "BTS".
4. Be sure you are the only person using your stamp. It is advisable to keep this stamp where only you have access to it.
5. In case of loss notify the data supervisor and the occupational area coordinator immediately and a new and different stamp will be issued.
6. Since there are a number of ways a student's absence can be known, stamp only for persons present for a minimum of 45 minutes. Conflicting student attendance reports may trigger an audit.
7. Where a student shares time between your area and another, a slash (/) and two stamps are necessary.
8. In the event that a time card is lost, students should obtain a new one from the Scheduling Aide. They then should have their instructor fill in time attended to date.
9. Note at the bottom of time cards if a meeting is cancelled by Career Guidance or some other area, identifying the specific area cancelling the meeting.

STUDENT NAME

CLOCK NUMBER 3652-01 WEEK ENDING 11/15/74

HOURS	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY
A 8 - 9	26 FOOD SER	26 FOOD SER	26 FOOD SER	26 FOOD SER	26 FOOD SER
B 9 - 0	26 FOOD SER	80 COUNSEL	26 FOOD SER	26 FOOD SER	26 FOOD SER
C 10 - 11	26 FOOD SER	80 COUNSEL	26 FOOD SER	26 FOOD SER	26 FOOD SER
D 11 - 12	26 FOOD SER	81 MATHS	80 COUNSEL	26 FOOD SER	26 FOOD SER
E 1 - 2	26 FOOD SER	26 FOOD SER	26 FOOD SER	26 FOOD SER	26 FOOD SER
F 2 - 3	26 FOOD SER	26 FOOD SER	26 FOOD SER	26 FOOD SER	26 FOOD SER
G 3 - 4	26 FOOD SER	26 FOOD SER	26 FOOD SER	26 FOOD SER	26 FOOD SER

9 1

9 1

6 week

STUDENT NAME GREEN JANICE DATE 12/20/74 90
CLOCK NUMBER 3639-02 WEEK ENDING 12/20/74 CLOCK NUMBER 3639-02

HOURS	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	CURRICULUM VARIANCE			
						MISSED		ATTEND	
						NO.	HRS	NO.	HRS
A 8 - 9									
B 9 - 10	48 PLANNING	48 PLANNING	48 PLANNING	48 PLANNING	48 PLANNING				
C 10 - 11									
D 11 - 12									
E 1 - 2	48 PLANNING	48 PLANNING	48 PLANNING	48 PLANNING	48 PLANNING				

(for use by Data Center)

STUDENT ATTENDANCE ROSTER

Description and Purpose

The Student Attendance Roster is a computer printout which lists students alphabetically by time module for each instructional area. It has provisions for the instructor to mark students present, absent or validated in five columns, one for each working day of the week. See the attached completed Student Attendance Roster.

The purpose of the roster is to:

1. Control class loading in order to prevent under and overloading.
2. Provide instructor feedback on student attendance.
3. Provide a cross reference to time cards.
4. Provide additional attendance input used to determine attendance variance.

How the Roster Fits into the System

Instructors are furnished with an attendance roster each Friday afternoon by the Data Center. The roster is up to date as of the previous Wednesday and hand corrected to current date, and furnishes a class list of students, indicating those who are to be present and when. The information contained on the roster reflects that compiled from student time cards and the previous week's roster, fed into the computer system in Butte, and printed out as the Attendance Roster. The Roster furnishes the instructor with class loading information and the instructor, in completing his portion of the roster, furnishes updated information which is fed back into the system.

Specific Procedures for Instructor Use

1. Enter a "P" for present at the end of each module. (See example)
2. Enter "A" for absent at the end of each module. It is advisable for the instructor to fill out the roster at the time the time card is stamped.
3. In the case of a student validating, a "V" should be entered in that and all subsequent modules until the student's name is deleted from the roster.
4. Enter a "D" for students on the roster that have deserted or dropped.
5. An instructor may not allow a student into a class unless the student:
   a. is scheduled on attendance roster, or
   b. presents a special schedule from the Data Center. Students showing up for class but not on Roster are to be referred immediately to the Registrar's office. A "special schedule" authorizing the student's attendance may be issued by that office and hand carried to the instructor. Once a student enters with a special schedule, he is to be listed on the roster (see example). A, P, and V are entered after this student's name as for the regularly scheduled students.
6. If a meeting is cancelled by Career Guidance or Counseling, note it at the bottom of the time card, identifying the area, and sign.

6. The instructor having the primary responsibility for the students must sign the completed roster before the time it is picked up by the scheduling aide.
7. The roster for the forthcoming week will be hand carried to the instructional areas by the last module each Friday.
8. If instructors have unusual circumstances requiring change to class loading, the request should be routed through the Associate Director of Education Services.

MOUNTAIN PLAINS — INSTRUCTOR CLASS LIST

PAGE 1 — DECEMBER 6, 1974 SCH-080

INST. NAME - COMMUNICATION SKILLS — CLASS CAPACITY - 60

INST. NO. - 0143-015-00

WEEK ENDING - 12/06/74

TIME MODULE - B

			MON	TUE	WED	THR	FRI
ADAMS	DEBRA	3663-02	A	P	P	A	P
AGAN	DEILA	3666-03	P	P	P	P	P
ANDREWS	MARY	3745-02	P000	A	P	P	P
BELL	KIM	3706-02	000	P	X	X	V
CAREN	DENNIS	3715-01	P	P	000	P	P
EHRMANTRAUT	LINDA	3764-03	A	A	P	P	P
GARCIA	ROBERT	3658-01	P	P	A	P	P
GARDNER	JERRY	3613-04	A	P	P	A	A
HILL	FRANKLYN	3730-01	A	A	A	A	A
HOF	JAMES	3719-01	A	000	A	A	A
HOF	PATRICA	3719-02	A	000	A	A	A
KICKLAND	SHIRLEY	3674-02	P	P	P	P	P
MAJORS	JESSE	3742-01	P	A	P	P	P
MITCHELL	BETTY	3660-02	A	000	000	000	000
MITCHELL	HERSCHEL	3660-01	P	000	P	P	P
PLADSON	WALLACE	3702-01	P	P	P	P	P
ROLLER	LOREN	3752-01	P	P	P	P	P
SHIRMAN	BERNARD	3748-01	P	P	P	P	P
SPOTTED HORSE	ADELLA	3736-02	P	P	P	P	P
TURNER	KATHLEEN	3749-02	P	P	000	P	A
VERHULST	GABRIELE	3713-02	A	000	P	P	P
WOLCOTT	JOANNE	3613-03	P	P	P	A	P
WRIGHT	MYRA	3743-02	A	A	000	A	A
			60	60	60	60	60
			21	18	19	22	22
			39	42	41	38	38

SPECIAL SCHEDULE

Hanna, Sandy		P	A	A	A	A
INCASHOLA,	PETE		P	P	A	P
INCASHOLA,	DOROTHY			P	P	P
PASCHALL,	MONICA				P	P

STUDENT COMPLETION CALENDAR

Description and Purpose

This document, which is printed on 5-part NCR paper, is for the primary purpose of establishing a firm program completion date for a student. A Calendar, which has been completed, is attached for reference.

How the Calendar Fits into the System

When the student has remaining about 45 working days or roughly 280 class hours, based on SWP and attendance data, the Data Supervisor makes up a completion calendar for distribution to:

1. Student working file.
2. Placement office.
3. Data Supervisor and Student Advisor.
4. Concerned instructional staff.
5. Student.

The Student Advisor then confers with the appropriate instructors concerning the student and the accuracy of the information on the form. The following information on the calendar is derived from a computer printout:

1. Estimated exit date (based on rate of progress against the norm, corrected for attendance).
2. Balance of instruction hours remaining.
3. Hours accomplished.
4. Progress hours versus attended hours (+ or - 100%).
5. Areas yet to be validated.

This computer printout is a compilation of information from a number of sources:

1. SWPs.
2. Student Profile Summary.
3. Time Card.
4. Attendance Roster.

Finally, the Student Completion Calendar is disposed of as follows:

-- Data is compiled into a Student Completion Roster weekly.
-- Individual calendars are filed by the Data Supervisor into a special file for completed students.
-- A check is made to ascertain that the actual student completion date corresponds to the estimated completion date per completion calendar.

A number of departments make use of the calendar. It is of utmost importance to placement and to those involved with recruitment.

PLACEMENT: When the student has 30 days left before exit (22 working days), he is scheduled for interviews with the Placement Officer, and into other completion-oriented activities.

RECRUITMENT: The six state offices and the Administrative Assistant for State Office Operations need to be constantly aware of the need for recruits, such need largely based on the numbers of students leaving the program.

The data on the calendar is compiled weekly into the Student Completion Roster, which comprises names of all students who are to exit within 45 to 30 working days. This Roster is distributed as follows:

Instructional Areas	Editor of the FORUM
Counselors	Ed. Services Director
Career Guidance	Coordinator of Ed. Programs
Six-State Offices & Admin. Assistant for 6 State Operations	Health Education
Gymnasium	Placement
Early Childhood Education	Data Center
	North Star School

Specific Procedures for Instructor Use

Instructors should:

1. In general, cooperate with student advisors in confirming, revising, or updating the completion date by notifying the advisor.
2. Notify, as soon as possible, the Student Advisor by telephone or memo of the names of students who are progressing more quickly than the program average and who may be expected to complete in less than 45 days after entering the occupational area.
3. Notify the Student Advisor of any deviations during the 45 day out mode, such as: a change in the student's progress or attitude that would alter the completion date by five (5) or more working days.
4. Notify the Senior Instructor of any and all changes in student progress that would alter the completion date plus or minus more than one day when in the 22nd working day mode. The Senior Instructor will immediately notify the Student Advisor of such change. Changes in student completion dates at the start of or during the 22nd day exit mode require the approval of the Placement Officer.
5. Calendar changes due to sickness, interviews or schedule changes will be initiated within the Registrar's Office.

As indicated, the Student Completion Calendar is used by a variety of persons for a number of reasons. The instructor provides an important input into the document. Data derived from the SWP, DET, SPR and Time Card provide basic information for the Calendar. Also, as noted above, instructors are responsible to follow the student calendar or a completion schedule and notify the advisor when adjustments are needed.

Flag Date 1/8/75

STUDENT COMPLETION CALENDAR

Completion Date 2/7/75

NO. 3613 NAME P. Smith

DATE PREPARED 11/14/74

ADVISOR Jones

AREAS TO COMPLETE	Scheduled Hours Remaining	Week No. 1	2	3	4	5	6	7	8	9	10	11	12	13	14
		Week Ending 11/22	11/29	12/6	12/13	12/20	12/27	1/3	1/10	1/17	1/24	1/31	2/7		
	Scheduled	10	10	20	5	20	15	24	26	30	30	30	30		
Office Ed	Balance of Hours 250	240	230	210	205	185	170	146	120	90	60	30	0		
Instructor's Name															
	Scheduled	10	2												
Math	Balance of Hours 12	2	0												
Instructor's Name															
	Scheduled	10	6	10	5	10	9								
Comm Skills	Balance of Hours 50	40	34	24	19	9	0								
Instructor's Name															
	Scheduled				20				4						
Compl Activities	Balance of Hours 24				4				0						
Instructor's Name															
	Scheduled														
	Balance of Hours														
Instructor's Name															

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COMPLETION ROSTER

WEEK ENDING 12/6/74

STU. NO.	NAME	AREA	FLAG DATE	COMPLETION DATE
3609	SAUNDERS, CHUCK	BOOKKEEPER	10/11/74	11/25/74
3567	TRACKE, IONA	COOK	10/25/74	11/27/74
3486	PETERSON, LEROY	TUPE UP MECH	10/29/74	11/29/74
3549	DAMMEL, DENNIS	M & D	10/29/74	11/30/74
3482	BEARDSLEY, BEN	DRAFTING	10/25/74	12/06/74
3490	RONKE, RICHARD	GEN. MECH.	11/04/74	12/06/74
3517	SIMPSON, MIKE	GEN. MECH.	11/04/74	12/06/74
3742	FARNUM, MIKE	ENGINE REPAIR	12/09/74	01/10/75
3707	SCHMIDT, KEITH	APPL. SERV.		12/11/74
3572	VANVLEET, DAVID	DRAFTING	11/11/74	12/13/74
3601	WESTERMAN, DON	DRAFTING	11/11/74	12/13/74
3557	SKJONSBERG, RON	ELECT/WIRE.	11/11/74	12/15/74
3629	PERLEY, THOMAS	DRAFTING	11/12/74	12/16/74
3530	OKSANEN, ROBERT	CARPENTRY	11/12/74	12/16/74
3547	HALFERTY, DAVID	DRAFTING	11/12/74	12/20/74
3617	MARTIN, PEGGY	BOOKKEEPER	11/21/74	12/23/74
3594	STONE, BETTY JO	DRAFTING	11/21/74	12/24/74
3613	WOLCOTT, JOANNE	CLERK/TYPIST	11/22/74	12/26/74
3687	ANDERSON, ALDEAN	CLERK/STENO	11/22/74	12/27/74
3667	ANDERSON, HOWARD	DRAFTING	11/26/74	12/30/74
3579	MICKEY, CHUCK	MID/MNGT.	12/02/74	1/03/75
3564	KLINE, DONALD	GEN. MECH.	12/04/74	1/03/75
3665	HOCKENBERRY, JOHN	DRAFTING	12/05/74	1/04/75
3518	WALES, ROBERT	GEN, MECH.	12/09/74	1/08/75
3615	HINTZ, RUTH	CLERK/TYPIST	12/09/74	1/09/75
3561	CRUZ, PATRICIA	CLERK/TYPIST	12/09/74	1/10/75
3701	HALL, LANNIS	TUNE UP MECH.	12/09/74	1/10/75

STUDENT PROGRESS RECORD

Description and Purpose

The Student Progress Record is a listing in outline form of curriculum to the LAP level by component titles with provision for data recording by students and instructors. There is an SPR for each Family Core Curriculum area, both basic and advanced Math and Communication Skills, and for each authorized career job title. An SPR for support areas to job titles also exists. (Note: The SPRs for Math and Communication are used differently than the others.)

The SPR is used to record data not otherwise available. This data is used for administration, which includes student progress monitoring, and for baseline data for research and evaluation purposes, such as curriculum validation.

How it Fits into the System

The Test Center originates the SPR along with the Student Work Plan (SWP) for each student when he is pretested for each curriculum area he enters. The last two columns on the right are for comprehensive pre and post test results which will be filled in by the Test Center. From the Test Center the SPR, with the SWP, goes: (1. staff delivered for FCC; 2. hand carried by student for career job titles; 3. no SPRs at pretest for Foundation Education) to the Data Monitor Office. There it is checked against the master list, quality checked and logged. It is again staff carried to FCC areas and hand carried by students to the career area. In the instructional area it is used as a primary data recording form and is filled out by both student and instructor. It is used as a basis for filling out the Student Work Plan and is one input for filling out the Developmental Employability Traits form (DET).

When students complete the Family Core Curriculum areas, the student delivers his SWP and SPR to the scheduling aide and has his scheduled changed. The scheduling aide then forwards the SWP and SPR to the Data Monitor's Office. After all four areas are completed, the scheduling aide schedules the student to the Test Center for post-testing. The SWP and SPR are hand carried to the Test Center by the student. The SWP and SPR, with test results, are returned to the Data Monitor Office by the Test Center.

As students complete <u>each</u> career curriculum area, the instructor will call the advisor aide. The student will be instructed to hand carry his/her Student Work Plan and Student Progress Record to the Data Center. A special schedule will be prepared and the student will then hand carry his/her Student Work Plan and Student Progress Record to the Test Center for cognitive post testing. The Data Monitor Office cannot sign a student's Termination Form without having the SPR and SWP for <u>each</u> area in which he was enrolled. When a student deserts the program, the Registrar will notify the Education Services Division, which will ensure that all SPRs are filled out up to date and forwarded to the Data Monitor Office along with the Student Work Plan.

Specific Procedures for Instructors Use

When the SPR is received in the instructional areas, it should have the student's name and number, pre-test date and comprehensive pre-test scores clearly entered. The curriculum elements prevalidated by the comprehensive test are indicated by a "V" following the score for that component.

In the instructional area the instructor is responsible for the following entries:

1. The instructor enters the date the student began attending the area in the entry date space.
2. The instructor ensures that for each curriculum component the student records:
   a. date component started.
   b. date component completed.
   c. time in hours, to the .5 hour, that the student felt he spent on the component is recorded daily.
3. Include for each LAP or test.
   a. Time for getting materials out.
   b. Study and/or work time.
   c. Tear-down and put-away time.
   d. Time spent or take home work.
4. Do not include time that does not contribute to mastery of the LAP material.
   a. General shop clean-ups.
   b. Coffee breaks and wash up.
   c. Other non-productive tasks.
5. The instructor initials each curriculum component to signify that the above data is entered and that the curriculum component has been validated by the student.
6. The instructor is to enter all instructor given unit pre and post test scores and performance test results (pass or fail) in the sapces provided in the Component Title column of the SPR. In the event a unit cognitive test is failed, enter the scores as always, leaving room for subsequent entries upon retakes. There will be no more than a total of three entries. Treat performance test entries similarly, using "F" or "P" rather than raw scores. (See Appendix D for detailed testing information.)
7. When a block of review time is used by the student that does not fit into LAPs or units, write "review" immediately to the right of the next higher level title (such as unit or course) and have the student enter the review time in the "time spent" column.
8. The instructor monitors to assure that the student records his time daily, insuring accurate and current records. (Note: it is suggested that these daily entries be made on a worksheet copy of the SPR till each component is completed and then transferred to the official SPR. The time may also be recorded on the LAPs or other method preferred by the instructor. The important thing is to maintain good records.)
9. Unit pre-tests are given only at a student's request and when it appears that he may be capable of prevalidation of the unit.
10. Foundation Education will originate a student individual profile for each student with the above information except #3, but including all units pre-tested for #9.

Curriculum Department will periodically monitor each area for, among other things, timely and complete SPR maintenanc

STUDENT PROGRESS RECORD

Name (1) _____ Number _____

Curriculum Area 37 AUTOMOTIVE

JOB TITLE: Tune-up and Engine Repair

Entry Date _____

Pretest Date (2) _____

Post Test Date (12) _____

		Time Spent in Curric. Compon.	Date Started	Date Completed	Instructor's Initials		
.02	Battery Load Test						
.03	Testing Cranking Voltage						
.04	Testing Ignition Coil						
.05	Testing Secondary Cable Resistance						
.09	Engine Repair						
	Pretest Score Post Test Score						
.01	Fundamentals of 4-Cycle Engines	(6)	(4)	(5)	(7)	(3)	(11)
	Pretest Post Test Perf. Test						
.01	Fundamentals of 4-Cycle Engines						
.02	Engine Construction						
	Pretest (8) Post Test (9) Perf. Test (10)						
.01	Fundamentals of Engine Block						
.02	Engine Block Construction						
.03	Valve Train						
	Pretest Post Test Perf. Test						
.01	Fundamentals of Engine Block						
.02	Inspecting Cylinder Head						
.03	Overhaul Over-Head Valve Head						
.04	Overhaul Over-Head Cam Head						
.04	Engine Block						
	Pretest Post Test Perf. Test						
.01	Overhaul Engine Block						
.02	Cam Shaft						
.03	Crank Shaft and Bearings						
.04	Pistons						
.05	Rods						
.06	Timing Gears and Chains						
.05	Lubricating Systems						
	Pretest Post Test Perf. Test						
.01	Fundamentals of Oil Pumps						
.02	Testing Oil Pump						
.03	Replacing Oil Pump						
12	Parts and Accessories						
	Pretest Score Post Test Score						
.03	Cleaning Parts and Work Area						
	Pretest Post Test Perf. Test						

When the SPR arrives in the Instructional Area it should contain or be filled out as follows:

TC	(1)	Student Name and Number
TC	(2)	Comprehensive Pretest Date
TC	(3)	Comprehensive Pretest Scores (Followed by V for elements prevalidated)
S	(4)	Date Curriculum Element Started
S	(5)	Date Curriculum Element Completed
S	(6)	Time Spent on Curriculum Element
I	(7)	Instructor's Initials
I	(8)	Unit or Course Pretest Score and Performance Test Results (P or F) If Element Challenged
I	(9)	Unit or Course Post Test Score
I	(10)	Performance Test Results (P or F)
TC	(11)	Comprehensive Post Test Results
TC	(12)	Comprehensive Post Test Date

Responsibility For Entry

TC = Test Center
S = Student
I = Instructor

STUDENT WORK PLAN

Description and Purpose

There is a Student Work Plan which lists the Student Terminal Performance Objectives for:

1. Each Family Core Curriculum area.
2. Both basic and advanced Math and Communication Skills.
3. Each job title in the career areas (an SWP also exists for support areas).

The SWP, printed on 3- to 5-part NCR paper, has provision for comprehensive pre and post scores by STPOs and lists curriculum to the unit level to support each STPO. At the unit level the SWP indicates normative student time in hours and has provision for recording:

1. Prevalidation of units by the comprehensive test.
2. Student recorded time from the SPR (Student Progress Record).

Finally, the SWP provides for determining the student's budgeted time for each of his curriculum areas.

The SWP is supported by the SPR and serves as a student data form and data transmittal document. It is used in student planwriting, student progress monitoring, research and permanent records.

How it Fits into the System

The SWP originates in the Test Center along with the SPR when the student is pre-tested for each of his curriculum areas. On it the Test Center records:

1. Student's name.
2. Pre-test date.
3. Comprehensive pre-test score by STPOs and total score.
4. Units prevalidated.

From the Test Center it goes with the SPR, by staff delivery for FCC and student hand carried for career areas, to the Data Monitor Office. (One copy of SWP for Foundation Education.) There it is checked for completeness, quality, logged, percent scores computed and a copy retained for the student folder. The retained copies are used to write the student's plan and for initial computer loading while the remaining copies are again staff delivered to the FCC areas and student hand carried to the career areas. (Staff delivered directly from the Test Center to Foundation Education.) For the FCC areas, the SWP is filled out from the SPR by instructors and returned with the SPR to the Data Monitor Office by the student when he completes or ceases to attend the area. It is staff delivered for deserting students. In Foundation Education the student is pre-tested in the area. The SWP and individual student profile are completed by instructors and hand carried by the student to the scheduling aide.

In the career area, the SWP is used as a student progress transmittal document (information entered by instructors from the SPR), including six week progress reviews and special reviews as needed. As students complete each career curriculum area, the instructor will call the advisor aide. The student will be instructed to hand carry his/her Student Work Plan and Student Progress Record to the Data Center. A special schedule will be prepared and the student will then hand carry his/her Student Work Plan and Student Progress Record to the Test Center for cognitive post testing. The Test Center informs the student when to pick up the SWP and SPR to hand carry to the Data Monitor Office, for computing loading, research and permanent records. Again, if a student deserts, the Registrar notifies the Education Services Division and the SWP is staff delivered to the Data Monitor Office.

Specific Procedure for Instructor Use

When the SWP is received in the instructional areas, it should have the student's name, pre-test date, pre-test score by STPOs and a "V" in the parentheses (V) for units prevalidated.

In the instructional areas the instructor is responsible for the following entries:

1. Entry date when the student begins the area.
2. Progress data at designated review dates (dates to be provided by the Data Supervisor) which includes:
   a. for units completed, the student recorded time inside the parentheses, which is the sum of the times recorded on the SPR for LAPs and tests in the unit.
   b. for incomplete units, the student recorded time recorded to the immediate right of the parentheses. This time is the sum of all student recorded time from the SPR for LAPs and tests within the unit. This time is to be current (refer SPR section). A copy of the updated SWP is then forwarded to the Data Monitor.
3. Exit date when the student ceases attending the area.

When the student validates or ceases to attend the area, the instructor will:

1. Notify the advisor aide by phone.
2. Ensure that the SWP and SPR are up to date.
3. Have the student hand carry the SWP and SPR to the scheduling aide.
4. If the student is not available for the above, the instructor will forward the updated SWP and SPR to the Data Monitor Office as soon as notified by the Registrar through the Education Services Division.

STUDENT NUMBER (1) ____

STUDENT WORK PLAN

Name (2) ____

Rater (3) ____

Date (Entry) (4) ____ (Exit) ____

KEY FOR FILLING OUT RIGHT HAND PARENTHESES:
(V) Unit prevalidated on pretest indicated by entering a "V" in the parentheses following unit code.
( ) For Completed Units enter total hours from SPR "Time Spent . . ." in the parentheses.
( ) For Incomplete Units enter total hours for completed LAP's from from SPR "Time Spent . . ." at the immediate right of the parentheses

Instructional or Curriculum Area: 27 PROFESSIONAL SALESPERSON	Comprehensive Written Test PRE	Comprehensive Written Test POST	Performance Check List PRE	Performance Check List POST	Attitude Check List PRE	Attitude Check List POST	Other: Specify PRE	Other: Specify POST	COURSE UNITS NEEDED	Est. Time / Act. Time
Objectives: Demonstrate an understanding of the fundamentals of good salesmanship and an ability to apply this knowledge in a simulated sales situation.	(5)								(24) 07.01 ( ) (15) 07.02 ( )	(9)
	3									
Demonstrate an understanding of sales-supporting services provided by wholesale and retail businesses.	(5)								(5) 08.01 ( ) (10) 08.02 ( )	(9)
	35									
Demonstrate an understanding of advanced concepts and practices of good salesmanship and an ability to apply this knowledge in a simulated sales situation.	(5)								(24) 09.01 ( ) (42) 09.02 ( ) (15) 09.03 ( ) (15) 09.04 ( )	(9)
	60									
Demonstrate an understanding of the fundamentals of advertising and sales promotion activities and an ability to construct an advertisement for a local newspaper.	(5)								(23) 10.01 ( ) (5) 10.02 ( )	(9)
	40									
40										
TOTALS	(6)								JOB TITLE HOURS 359 ADJUSTED JTH ____ ADJUSTED SUPPORT HOURS ____ TOTAL ADJUSTED HOURS (11) ____	Total Est. Time (10) / Total Act. Time

When the SWP arrives in the Instructional Area it should contain or be filled out as follows:

TC	(1)	Student Number
TC	(2)	Student Name
I	(3)	Instructor's Name
I	(4)	Entry Date
TC	(5)	Comprehensive Pretest Scores by STPO
TC	(6)	Comprehensive Score Total
DM	(7)	Comprehensive Score %
TC	(8)	Units Prevalidated by Comprehensive Test (V)
DM	(9)	Estimated Time by STPO
DM	(10)	Total Estimated Time
A	(11)	Total Adjusted Hours

Responsibility For Entry

TC = Test Center
I = Instructor
DM = Data Monitor Office
A = Advisor

Actual Score / Possible Test Score
Score Necessary to Prevalidate / Possible Test Score

PRETEST	POST TEST
(7) %	%

FOR DATA MONITOR USE

Date updated ____

47

48

STUDENT WORK PLAN

STUDENT NUMBER _____

Name _____

Rater _____

Date *(Entry)*_____*(Exit)*_____

KEY FOR FILLING OUT RIGHT HAND PARENTHESES:

(V) Unit prevalidated on pretest indicated by entering a "V" in the parentheses following unit code.

( ) For Completed Units enter total hours from SPR "Time Spent . . ." in the parentheses.

( ) For Incomplete Units enter total hours for completed LAP's from from SPR "Time Spent . . ." at the immediate right of the parenthese

Instructional or Curriculum Area	Comprehensive Written Test PRE	Comprehensive Written Test POST	Performance Check List PRE	Performance Check List POST	Attitude Check List PRE	Attitude Check List POST	Other Specify PRE	Other Specify POST	COURSE UNITS NEEDED	Est. Time / Act. Time
37 TRANSMISSION MECHANIC										
Objectives: The student will demonstrate knowledge, acceptance, participation, appropriate work relations, job roles and responsibilities.										
The student will practice accident prevention techniques.	12 / 15	12 / 15							(10) 01.01 (1)	
The student will demonstrate mastery of cognitive skills.	244 / 305	244 / 305							(40) 10.01 ( ) (25) 10.02 ( ) (40) 10.03 ( ) (45) 10.04 ( ) (150) 10.05 ( ) (175) 10.06 ( ) (10) 10.07 ( ) (40) 10.08 ( ) (5) 12.01 ( ) (5) 12.02 ( ) (10) 12.03 ( ) (20) 13.01 ( ) — 2	
The student will demonstrate skill application.										
The student will demonstrate familiarity with and competence in, the use of tools, equipment and/or materials.	12 / 15	12 / 15							(5) 02.01 ( ) (5) 02.02 ( ) (5) 02.03 ( )	
41										
TOTALS	335	335	52						JOB TITLE HOURS 590 ADJUSTED JTH _____ ADJUSTED SUPPORT HOURS _____ TOTAL ADJUSTED HOURS _____	Total Est. Time / Total Act. Time

PROGRESS REPORTING ENTRIES TO BE MADE BY INSTRUCTORS

I (1) For Completed Units - Total the time recorded by the student for each LAP in the Unit and enter inside the parenthesis following the Unit Number on the SWP. (X)

I (2) For Units Started But Not Completed - Total all the Student Recorded Time for LAPs in the Unit and record to the right of the parenthesis for that Unit. ( ) X

I (3) Enter the Date of the Update on the lower right corner of the SWP near where it says "FOR PLANNER USE".

Responsibility For Entry

I = Instructor

Actual Score / Possible Test Score
Score Necessary to Prevalidate / Possible Test Score

49

PRETEST	POST TEST
%	%

FOR DATA MONITOR USE

(3) Date updated _____

50

STUDENT NUMBER ___ ___

Name _____

Rater _____

Date (Entry) _____ (Exit) (2)

STUDENT WORK PLAN

KEY FOR FILLING OUT RIGHT HAND PARENTHESES:
(V) Unit prevalidated on pretest indicated by entering a "V" in the parentheses following unit code.
( ) For Completed Units enter total hours from SPR "Time Spent . . ." in the parentheses.
( ) For Incomplete Units enter total hours for completed LAP's from from SPR "Time Spent . . ." at the immediate right of the parentheses

Instructional or Curriculum Area: 27 PROFESSIONAL SALESPERSON	Comprehensive Written Test PRE	Comprehensive Written Test POST	Performance Check List PRE	Performance Check List POST	Attitude Check List PRE	Attitude Check List POST	Other: Specify PRE	Other: Specify POST	COURSE UNITS NEEDED	Est. Time / Act. Time
Objectives: Demonstrate an understanding of the fundamentals of good salesmanship and an ability to apply this knowledge in a simulated sales situation.	3								(24) 07.01 ( ) (15) 07.02 ( )	
Demonstrate an understanding of sales-supporting services provided by wholesale and retail businesses.	35								(5) 08.01 ( ) (10) 08.02 ( )	
Demonstrate an understanding of advanced concepts and practices of good salesmanship and an ability to apply this knowledge in a simulated sales situation.	60								(24) 09.01 ( ) (42) 09.02 ( ) (15) 09.03 ( ) (15) 09.04 ( )	
Demonstrate an understanding of the fundamentals of advertising and sales promotion activities and an ability to construct an advertisement for a local newspaper.	40								(23) 10.01 ( ) (5) 10.02 ( )	
42										
TOTALS									JOB TITLE HOURS 359 ADJUSTED JTH ADJUSTED SUPPORT HOURS TOTAL ADJUSTED HOURS	Total Est. Time / Total Act. Time

FINAL ENTRIES TO BE MADE BY INSTRUCTORS WHEN THE STUDENT CEASES TO ATTEND AN AREA

I (1) Transfer all student recorded time from the SPR to the SWP.

I (2) Record date student ceased attending an area.

Responsibility For Entry

I = Instructor

(1)

Actual Score / Possible Test Score

Score Necessary to Prevalidate / Possible Test Score

51

PRETEST % Change

POST TEST % Change

FOR DATA MONITOR USE

FOR PLANNER USE

52

DEVELOPMENTAL EMPLCYABILITY TRAITS FORM

Description and Purpose

The Developmental Employability Traits evaluation form is a one page form, printed on 6-part NCR paper, designed for staff to report selected student affective traits on a three point scale with provision for narrative comments. The DET is used for incident reports as needed and in conjunction with each student's scheduled six week review concerning student progress.

How it Fits into the System

The DET is used both on an unscheduled (referral) basis and according to specific schedule. Unscheduled DETs are originated by any staff member who has opportunity and need to make a student assessment report. These are sent to the Data Monitor, who will forward them to the Registrar for appropriate action and distribution.

The scheduled DETs are originated by the Data Center according to the student six week review schedule list. These are delivered to the areas for instructor completion, picked up again at a specific time, and taken directly to the Data Monitor Office for processing and distribution. One copy is logged into the student folder for use by the Student Advisor.

Specific Procedure for Instructor Use

The unscheduled (referral) DETs are to be used on an as needed basis by instructors and are routed as stated above. Whenever an instructor needs to report an incident, document an incident or rating, or inform another person or division concerning a student, the instructor should use the appropriate part of the DET. Important: The insert in the DET contains instructions for using the rating scale and a set of specific objectives which should be kept in mind and referred to when rating the various traits.

The scheduled DETs will be received by the instructor with student name, date sent out, date due back, and job title the student is working toward already entered. Along with the DET the instructor is furnished with a computer print-out showing, for that student, current attended time along with student progress (in terms of normed curriculum time completed) and student recorded time from the previous six week review. Based on the updated student recorded time and student progress time entered on the SWP (see SWP section), the instructor is to make an assessment of the student's updated progress as compared to the attended time on the printout. A difference of about 25% between progress time

and attended time constitutes need for discussion of such difference on the DET, in terms of the student's ability to progress, attitudinal difficulties, reasons for slowness, etc. Also, there may well be implications for the Student Calendar, which the instructor should convey to the Advisor, if a student calendar has already been issued. The rating scales should also be used according to the instructions on the reverse side of the DET form.

Students whose six week review indicates less than 75% progress ratio will be flagged. The Advisor will furnish Senior Instructors with an up to date printout for those students. Pursuant to such notification, Advisors and Senior Instructors will confer with the instructor to determine such action as deemed appropriate. The cause of the discrepancy, and action taken will be added to the student's file in written form.

Date _____

To: _____ _____ (student), majoring in _____ is scheduled for a plan/progress review. To facilitate this effort please return this form to the Registrar by _____.

Budget Hrs.

Sched. Hrs.

Attend. Hrs.

Please rate each trait by checking the most appropriate box below using the following key:

Very Satisfactory. The student is strong on this trait and further development in this area is not required.

Satisfactory. The student is strong enough in this area to gain and maintain employment in his/her chosen career. Added strength would be helpful but it is not essential.

Unsatisfactory. This is a weak point of the student and requires work. The student might be able to gain employment, but would probably not be able to maintain employment due to this weakness.

Very Unsatisfactory. Because of this problem, the student is unemployable. Improvement is essential.

Individual/Personal Traits*	Very Satisfactory	Satisfactory	Unsatisfactory	Very Unsatisfactory
Appearance				
Self Concept				
Self Confidence				
Motivation				
Directedness				
Alcohol Problems				
Self Control				
Self Knowledge				
Self-Acceptance				
Flexibility				

Work Traits *	Very Satisfactory	Satisfactory	Unsatisfactory	Very Unsatisfactory
Competence				
Industriousness				
Accuracy				
Responsibility (tasks)				

Relationship Traits *	Very Satisfactory	Satisfactory	Unsatisfactory	Very Unsatisfactory
Cooperation				
Courtesy				
Perseverance				
Social Contact				
Intimacy				
Marital Harmony				

Overall Traits*	Very Satisfactory	Satisfactory	Unsatisfactory	Very Unsatisfactory
Dependability/Reliability				
Responsibility (personal)				
Ambition				

Comments and Recommendations: _____

(*Traits defined on back)

THIS FORM FOR:

- 6 Week Review
- Referral - General Information
- Referral - Immediate Attention
- Incident Report

(1) File, (1) Counseling, (1) Career Guidance, (1) Occupational Area.

_____ (Instructor Signature)

INDIVIDUAL/PERSONAL TRAITS

1. Appearance. Dress and grooming are appropriate to the career for which the student is preparing.
2. Self-Concept. The feeling that one is a worthwhile person.
3. Self-Confidence. The feeling that one has abilities and can reach realistically arrived at objectives by employing them.
4. Motivation. The student shows a desire to succeed in that he completes assigned tasks adequately without close supervision.
5. Directedness. The belief that one can through one's self-work, plan and influence the direction of one's own future.
6. Alcohol Problems. Alcohol is not abused and/or is not a detriment to job, personal, or family functioning.
7. Self-Control. The ability to appropriately express and channel one's feelings and impulses when inappropriate or instantaneous expression would impede achievement of long range/higher order goals/objectives.
8. Self-Knowledge. A felt understanding of one's own abilities, action, tendencies, aspirations and limitations.
9. Self-Acceptance. The ability to deal openly and honestly with one's strengths, weaknesses and abilities without overtones of egotism, self-pity, etc. In brief, accepting self-knowledge.
10. Flexibility. The ability to apply a root value or idea to a new situation that does not necessarily fit the usual verbatum statement of the value or idea. (An indicator is the absence of stubbornness or rigidity when confronted with resolution of apparent value of belief conflicts.)

WORK TRAITS

11. Competence. The student not only "passes tests" but applies knowledge in new and/or real life situations.
12. Industriousness. The student applies himself fully to his work with a minimum of unproductive time.
13. Accuracy. Work is completed properly by the student. It does not have to be redone because of errors.
14. Accepts Responsibility (tasks). The student accepts work assigned and does not avoid difficult or unwanted tasks.

RELATIONSHIP TRAITS

15. Cooperation. Works well with others, both co workers and supervisors.
16. Courtesy. Shows concern and understanding for the rights and needs of others.
17. Perserverance. The student does not become discouraged when initial approaches to task completion fail.
18. Social Contact. The ability to interact with persons and institutions in ways that fulfill the individual's needs without harming other persons or impeding fulfillment of institutional roles.
19. Intimacy. The ability to have meaningful interpersonal relationships with family and friends.
20. Marital Harmony. The ability to function, interact and grow as a family group with: shared goals, affectionate understanding, trust and constructively managed conflict.

OVERALL TRAITS

21. Dependability/Reliability. The ability to consistently do that which is expected or required; particularly as regards work/classroom performance.
22. Responsibility (overall). Acceptance of the fact that one's condition/situation is invariably the direct result of one's own actions/responses. Absence of blaming others, blaming self in self-pitying fashion (as opposed to accepting responsibility and learning from a situation). Acceptance of responsibility implies increased self-directedness (as opposed to dependence for direction on others).
23. Ambition. A real desire to succeed in school and on the job.

KEY PERSONNEL

1. Coordinator of Education Services
   William Connors
   Building 814, Room 120 Tel: 4-6542

2. Registrar
   L.D. Robison
   Building 810, Room 332 Tel: 4-3290

3. Data Monitor Office
   Vickie Turner
   Building 810, Room 327 Tel: 4-3542

4. Data Supervisor
   Gail Langen
   Building 810, Room 329 Tel: 4-6453

5. Advisor Aide
   Sheila Heikens
   Building 810, Room 321 Tel: 4-3933

6. Test Center Administrator
   Nancy Bunn
   Building 814, Room 105 Tel: 4-7129

7. Scheduling Aide
   Marilyn Stein
   Building 810, Room 333 Tel: 4-3933

INSTRUCTIONS FOR READING THE DATA PRINTOUT "ACTIVE STUDENT FILE"

1. STUDENT NUMBER

The student number is first of all a control number used in coding all data pertinent to a given student while at Mountain-Plains. The last 2 digits always indicate that

01 means dual parent family-head-of-household.

02 means dual parent family-spouse.

03 means single parent family-head-of-household.

04 means dependent child.

2. ENTRY DATE

The Entry Date is the date that the student first entered the Mountain-Plains program.

3. ESTIMATED COMPLETION DATE

The estimated completion date is the projected completion as indicated on the student's plan.

4. STATE

State is state of origin.

5. CLASS NUMBER

Class number corresponds to the curriculum number.

6. BUDGET HOURS

For each area this is the sum of the numbers to the left of unit numbers on the SWP except for prevalidated units. This is the best guess of how long it should take an average student to complete each curriculum area.

7. SCHEDULED HOURS

Current Hours - means number of hours scheduled for the current week.

Month Hours - means number of hours scheduled for that month.

C.T.D. (Cumulative to Date) - is sum of hours that the student has been scheduled into a given area.

8. ATTENDANCE

Month Hours - means total hours of attendance for that month.

C.T.D. Hours - means cumulative hours attended to date.

9. DIFFERENCE OF HOURS

Is difference between 7-8 above. That is the difference between scheduled hours and attended hours.

10. PROGRESS HOURS

A. Represents the hours of progress toward the budgeted time.

B. Student Record Hours: Sum of the hours recorded by the student on the SPR. (This time was for all completed LAPs but is now to be for all recorded time.)

11. BUDGET

Percent used is the attended hours (column 8 CTD) divided by Column 6 "Budget Hours". This figure is computed when SWP data is loaded for that student.

PROGRESS

Percent used is progress hours (column 10) divided by column 6 "Budget Hours".

12. SCHEDULE VS ATTENDANCE

Is the percentage found when time attended is divided by scheduled hours.

13. ATTENDED VS BUDGETED

The percentage found when time attended is divided into column 6 "Budget Hours".

14. PROGRESS VS ATTENDED

The percentage found when progress time is divided by the attendance time. If the estimated time assigned to LAPs is accurate, then the progress time reported will equal the attendance time if the student's progress is average. This percentage is to be used only as a reference point when using this column to measure student's progress.

USE OF INSTRUCTIONAL AREA TESTS

All cognitive tests in use in the instructional areas are not to be considered disposable materials. They are to be re-used until such time that, due to wear and tear, they are no longer readable. Separate answer sheets have been provided for all tests. This means that when taking a test, students are expected to use these answer sheets. On the answer sheet are spaces for the student to enter the test file code number, his/her name and family pay number. It is up to the instructor to audit all answer sheets to make sure that this information has been filled in.

LAP Tests

The LAP test is to be taken by the student when he or she feels that he has completed the work for that LAP. The test is to be self-administering and self-scoring. After completing the test, the student should go back into the curriculum and find the answers to any items he may have missed. Under no circumstances should the student be allowed to alter his original responses to each item. If in correcting the test, he writes the correct answer next to his response, his original response should still be clearly distinguishable.

LAP Progress Tests

In those instances where there is not a LAP test for each LAP, there are LAP progress tests covering two or more LAPs. These tests should be taken after the student completes the final LAP covered by the test. Aside from this, they are to be used exactly like LAP tests.

Unit Pre-Tests

These tests are to be administered only at the students request. If a student feels that he can accomplish the performance activity for a given unit without going through the curriculum, he may request to take the unit pre test. If he passes the unit pre test with a minimum score of 4 out of 5 per LAP, he may be administered the performance test at that point. If he fails the unit pre test, he should be directed into the curriculum sequence until he is ready for the normal unit post/performance test procedure. When administering a unit pre test, be sure to write PRE TEST across the top of the answer sheet. All unit test answer sheets will be assumed to be post tests unless so marked.

Unit Post-Tests

When a student feels that he has mastered the unit and is ready to take the performance test for that unit, he should be administered the unit post test at the same time as the performance test. The unit post test MUST NOT be scored before the performance test.

Unit LAP Tests

In those units that do not have LAP tests, the unit post test has been designated as a unit LAP test. Unit LAP tests should be used in the same manner as unit post tests.

Course/Unit Tests

In those courses that only have one unit, the tests have been designated as course/unit tests. In the instructional areas they will be used in the same manner as unit post tests.

Performance Tests

The performance test will be administered at the end of the unit when the student feels that he is ready to complete it. At the time the test is given, the assignment section should be filled in describing the exact task the student was expected to complete. The performance test must be administered and scored before the unit test results are obtained.

STUDENT VALIDATION

Units Without Performance Tests

In those curriculum units that do not have performance tests, the cognitive test will be used to validate students into the next unit. The recommended criteria for student validation under these circumstances is that the student obtain a minimum score of 4 out of 5 items for each LAP covered by the unit test. If a student obtains a score below the recommended criterion level, he should be directed back into those portions of the curriculum in which he did poorly. He should then be re-tested and the answer sheet should have SECOND TESTING written across the top of it. If a student fails the test a second time, the instructor has two options.

1. He can re-direct the student back into the curriculum and re-test him a third time. If after the third testing the student still has not achieved a satisfactory level of performance, the student advisor must be notified. At this point in time, some remedial action is mandatory.
2. If the instructor feels that nothing is to be accomplished by re-directing the student back into the curriculum, the student advisor should be notified at this point. As in option number 1, a plan must be formulated to deal with whatever problems are retarding the student's progress.

If the student passes the test, nothing more is necessary than to enter the results on the SPR and discuss the results with the student, giving him an opportunity to review the items he has missed.

Units With Performance Tests

In units with performance tests, student validation will be accomplished through satisfactory completion of the performance test. If the student passes the performance test, he will then proceed to the next unit regardless of his written test performance.

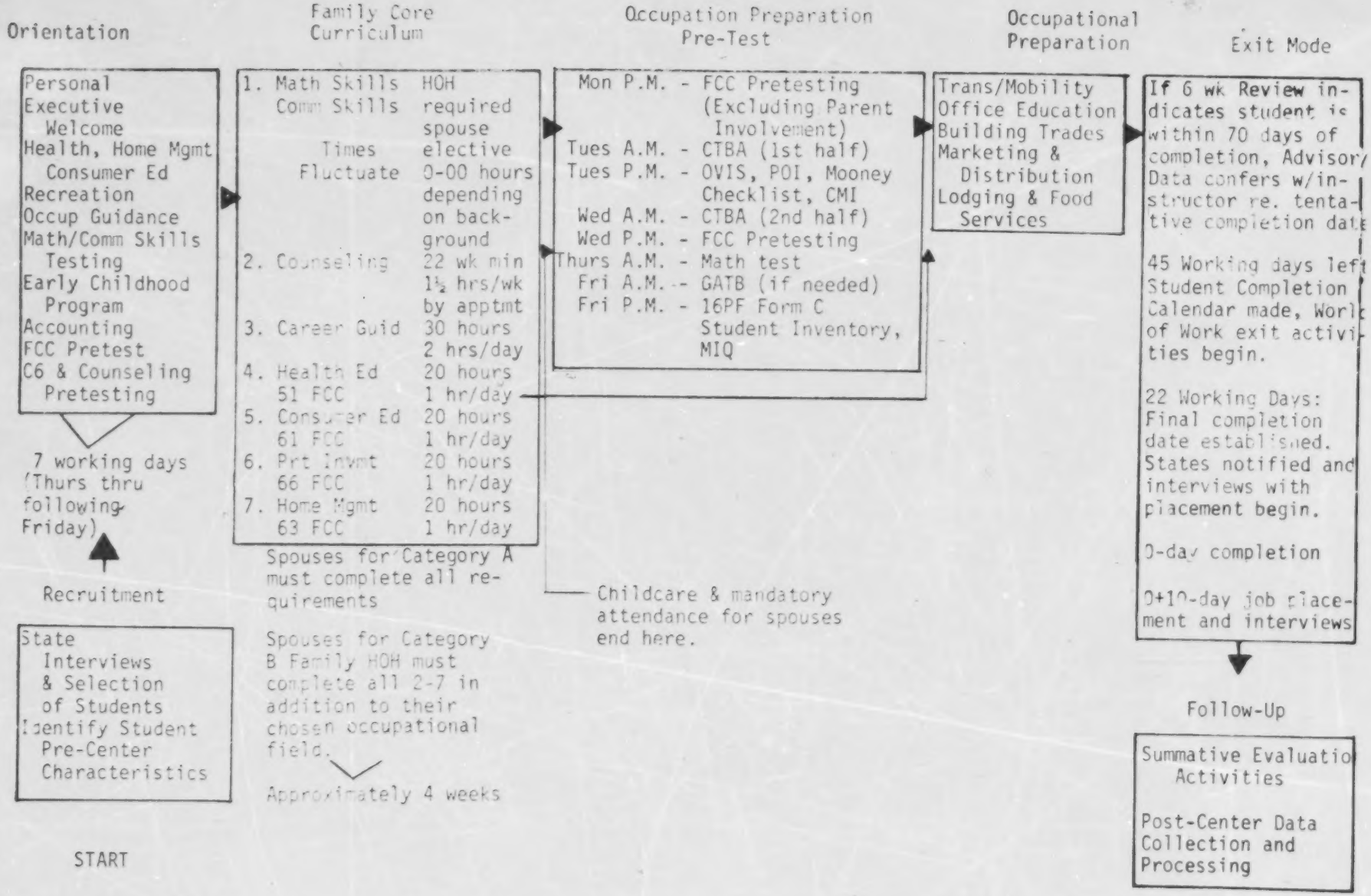
If a student fails the performance test, the written test and the performance test should be reviewed by the student and the instructor in a conference situation. This is so the instructor can use the test results to diagnose student problem areas. The student will then be re-directed back into the curriculum to correct his deficiencies in these problem areas. When the student feels that he is ready to retake the performance test, he will be re-administered both the written and performance test. If he fails the performance test a second time, the student advisor should be notified so that some action can be taken to uncover the reasons for poor student performance and correct them immediately.

FORWARDING OF TEST RESULTS

All cognitive test answer sheets should be kept together and forwarded to the TEST CENTER on a weekly basis. These answer sheets should be audited by the instructional staff to make sure that they have the correct file codes, student ID number, etc., filled out on them. Unit test answer sheets should be stapled to the performance test that was administered concurrently with it. This applies only to Mountain-Plains constructed tests.

January, 1975

GRAPHIC DISPLAY OF A PROGRAM COMPLETER



Mountain-Plains Education & Economic Development Program, Inc.

POST OFFICE BOX 3078 · GLASGOW AFB, MONTANA 59231 · TEL: (406) 524-6221

MOUNTAIN-PLAINS CURRICULUM MONITORING FORM CD-2

January 1975

Teacher _____ Test Site # _____

Date _____ Grade Level _____ CA # _____ Other _____

QUESTIONS	RESPONSES Yes	No
1. Are raw test scores logged on SPRs? Criterion: On a test sample of 10, 9 scores are logged. Job title level pre and post test scores are entered by the test center. Unit post and performance test scores are entered by the instructor. LAP test scores are entered by the student on answer sheets. Job title post test scores are entered on the SWP by the test center.		
2. Are prevalidation procedures being followed? Criterion: SPRs contain prevalidation entry marks which match those on SWPs. No students are found involuntarily using LAPs that are marked on SPR as having been prevalidated. (Students may work in prevalidated LAPs when this is review following failure of performance test.)		
3. Are students using LEGs? Criterion: 9 out of 10 randomly selected students can describe a LEG and report that they are using them.		
4. Are students using LAPs? Criterion: 9 out of 10 randomly selected students can relate their activities to a procedure on a specific LAP.		
5. Are students using LAPs as prescribed? Criterion: 9 out of 10 students observed proceed from one LAP to the next without instructor interaction, except where by necessity student tasks are not ordered the same as LAPs.		

QUESTIONS	RESPONSES Yes	No
6. Does instructor-student interaction conform to M-P curriculum design? Criterion: Over a one hour observation period, a maximum of 5 minutes is spent interacting with all students at once.		
7. Is instructor available as a resource person? Criterion: 8 out of 10 randomly selected students report instructor is available to help them when needed within a reasonable length of time.		
8. Are LAP tests properly used? Criterion: Observation and/or student report indicates students are taking and scoring LAP tests themselves.		
9. Are Unit tests properly used? Criterion: All observed instances show performance tests administered before scoring of written tests. All observed instances indicate that instructor is conducting both cognitive and performance tests in a manner which compels students to respond to test items without benefit of external information other than that prescribed by testing constraints.		
10. Is test data being properly collected? Criterion: Written Unit test answer sheets attached to performance tests; both tests given at the same time; LAP test answer sheets properly stored; course test answer sheets properly labeled as to pre and post; and all answer sheets collected and stored and have required information on them.		
11. Is the instructor observing all the guidelines for use of the SWP? Criterion: The key to SWP use is observed to be used in filling out the SWP. Data is recorded as a LAP (or unit if this is the smallest component required of that job title) is completed. Other information required by the form is entered in appropriate spaces.		

MOUNTAIN-PLAINS CURRICULUM MONITORING FORM CD-2

QUESTIONS	RESPONSES Yes	No
12. Is the Student Progress Record being used as designed? Criterion: Students or instructional staff fill out identifying information completely, accurately and neatly. Students fill in the first three columns as required. Instructor initials the appropriate column at the termination of a learning segment, indicating accurate and timely conformity to instructions by students.		
13. Are Curriculum Materials appropriately stored and used by students? Criterion: LAPs, LEGs and resource materials are kept in a place which is accessible to students.		
TOTAL	/13	

DEFINITIONS

Job Title and/or Course Pre and Post Tests - these are tests given before a student enters his instructional program, and then repeated upon completion of a job title. These tests are sometimes referred to as "comprehensive tests".

Instructional Area - the physical space occupied by instructors, equipment, students and facilities. This is where instruction takes place.

Curriculum Area - designated by a number, it is a convenient way of identifying a common body of instructions, and may be a job title. Examples: a) Small Engines - 38, b) Communication Skills - 15.

Curriculum Component - Course, unit, LAP, LEG, unit pretest, etc.

Completer - a student who has validated an occupational preparation area, World of Work, Consumer Education, Health Education, Career Guidance, Counseling, Math Skills and Communication Skills.

Exiting Student - when a student physically leaves Mountain-Plains.

Validating - when a student successfully completes an area.

Prevalidate - when a student validates a curriculum component by receiving a passing score on the pretest.

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CURRICULUM GUIDELINES

In keeping with the intent of Mountain-Plains Policy and Procedure, this is outlined for guidance in fulfilling the requirements of the project as they relate to Curriculum Design, Implementation and Evaluation.

THE ROLE OF CURRICULUM

As we shall see in following graphic illustrations and discussions, Curriculum is devised for the sole purpose of supporting the mission of Model IV.[1]

> *"The mission of Model IV is to develop, test and report the potential of a residential career education program to improve the economic and human viability of rural multi-problem families chosen from a Western six-state region. Success will be measured from both the viewpoint of society and of the family.*
>
> *From the viewpoint of society, the criterion of success will be economic payback to society as measured through cost-benefit analysis or economic return on investment.*
>
> *From the viewpoint of the family, the criteria of success will be family economic viability and satisfaction with job and life. Satisfaction with job and life will be measured directly. Family economic viability is defined as family economic growth and development. The criteria of success will be: a) job-getting, job-holding and job-progression, b) effective interaction with economic and related social aspects of society, c) effective family management.*

Figure 1

[1]Proposal for Grant Continuance, Vol. II, P.1

The criteria for family success as stated in Footnote 1 are:

a. job-getting, job-holding and job-progressing,
b. effective interaction with economic and related social aspects of society,
c. effective family management and
d. satisfaction with job and life.

In order to achieve these criteria, it is felt that family personal skills, employability skills and abilities allowing families and individuals to interact successfully with the Socio-Economic Environment are necessary. A number of family and individual skills are identified as related and necessary if families are to achieve the criteria for Program success. The skills identified are in Figure 2.

1.1 Employability Skills

- 1.1.1 World of Work
- 1.1.2 Work Attitudes
- 1.1.3 Academic Skills
- 1.1.4 Functional Job Skills

1.2 Home Life Skills

- 1.2.1. Family Relations
- 1.2.2 Health
- 1.2.3 Home and Consumer Management
- 1.2.4 Leisure Time Skills

1.3 Social Involvement Skills

- 1.3.1 Environment Adjustment
- 1.3.2 Interpersonal Relations

1.4 Personal Improvement Skills

- 1.4.1 Academic Personal Improvement
- 1.4.2 Problem Solving
- 1.4.3 Development and Implementation of Plans
- 1.4.4 Self-recognition Skills

Figure 2

With some changes already in effect and others to be effected, the four major headings and their sub-categories are analyzed and translated into measurable objectives called Student Terminal Performance Objectives (STPOs). These objectives are used to assign Production Component responsibility and serve as a reference against which Curriculum will be evaluated.

STPOs were written in accordance with the structure found in Figure 2. Since this structure is not congruent with that used for Production Components from which Curriculum falls out, a matrix is used (Figure 3).

PRODUCTION COMPONENTS - CURRICULUM COMPONENTS

This matrix, in effect, assigns Production Components to satisfy the requirements of the Project Mission. These Production Components are then broken down into the Instructional Hierachy, such hierachy being somewhat different for different Instructional Areas (Figures 4 and 5). That different terms are sometimes used for similar levels in the various Instructional Hierachies, does not seem to pose any problem. There is agreement on the location of the Unit level and the LAP level. These are the two levels which interface with students, and are the two levels which contain the more constant elements. Pretest, Post Test and Diagnostic test information comes directly from these sources.

EXAMPLE

Assignment of Responsibility or Production Components for Bringing About Student Mastery of Student Terminal Performance Objectives (STPO's)

PRODUCTION COMPONENTS

STPO's	Communication Skills	Math Skills	Occupational Preparation	Career Guidance	Counseling	Health Education	Consumer Ed. And Home Management
1.2.2.1						X	
.2							X
.3						X	
.4						X	
.5						X	
.6						X	
.7						X	
.8						X	
1.2.3.1							X
.2							X
.3							X
.4							X
.5							X
.6							X
.7						X	
1.2.4.1							
.2							
.3							
1.3.1.1					X		
.2							X
1.3.2.1					X		
.2							

Figure 3

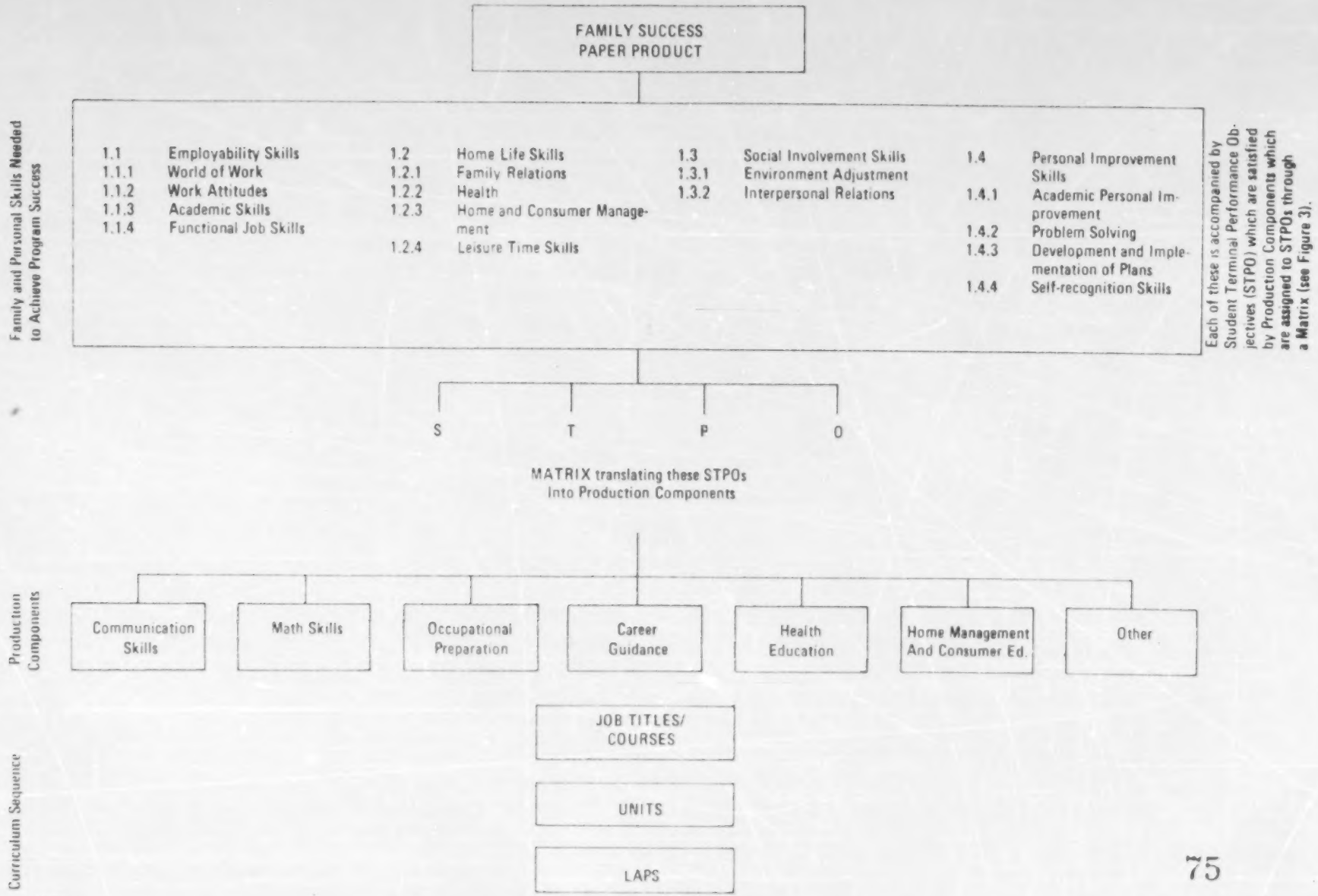

FAMILY SUCCESS PAPER PRODUCT
Family and Personal Skills Needed to Achieve Program Success
1.1 Employability Skills
1.1.1 World of Work
1.1.2 Work Attitudes
1.1.3 Academic Skills
1.1.4 Functional Job Skills
1.2 Home Life Skills
1.2.1 Family Relations
1.2.2 Health
1.2.3 Home and Consumer Management
1.2.4 Leisure Time Skills
1.3 Social Involvement Skills
1.3.1 Environment Adjustment
1.3.2 Interpersonal Relations
1.4 Personal Improvement Skills
1.4.1 Academic Personal Improvement
1.4.2 Problem Solving
1.4.3 Development and Implementation of Plans
1.4.4 Self-recognition Skills
Each of these is accompanied by Student Terminal Performance Objectives (STPO) which are satisfied by Production Components which are assigned to STPOs through a Matrix (see Figure 3).
S
T
P
O
MATRIX translating these STPOs Into Production Components
Production Components
Communication Skills
Math Skills
Occupational Preparation
Career Guidance
Health Education
Home Management And Consumer Ed.
Other
Curriculum Sequence
JOB TITLES/ COURSES
UNITS
LAPS

Figure 6

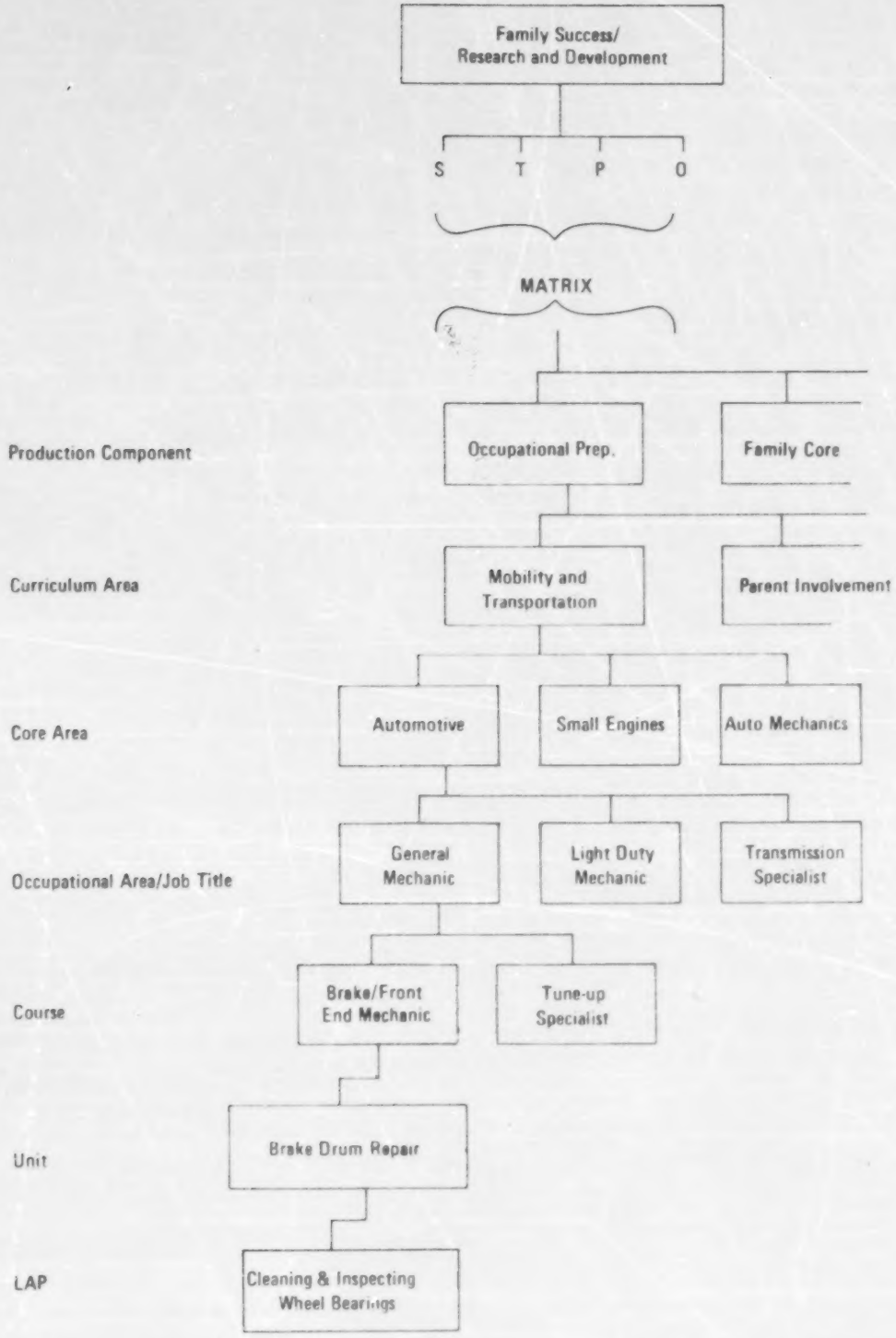

Family Success/
Research and Development
S
T
P
O
MATRIX
Production Component
Occupational Prep.
Family Core
Curriculum Area
Mobility and
Transportation
Parent Involvement
Core Area
Automotive
Small Engines
Auto Mechanics
Occupational Area/Job Title
General
Mechanic
Light Duty
Mechanic
Transmission
Specialist
Course
Brake/Front
End Mechanic
Tune-up
Specialist
Unit
Brake Drum Repair
LAP
Cleaning & Inspecting
Wheel Bearings

Figure 4

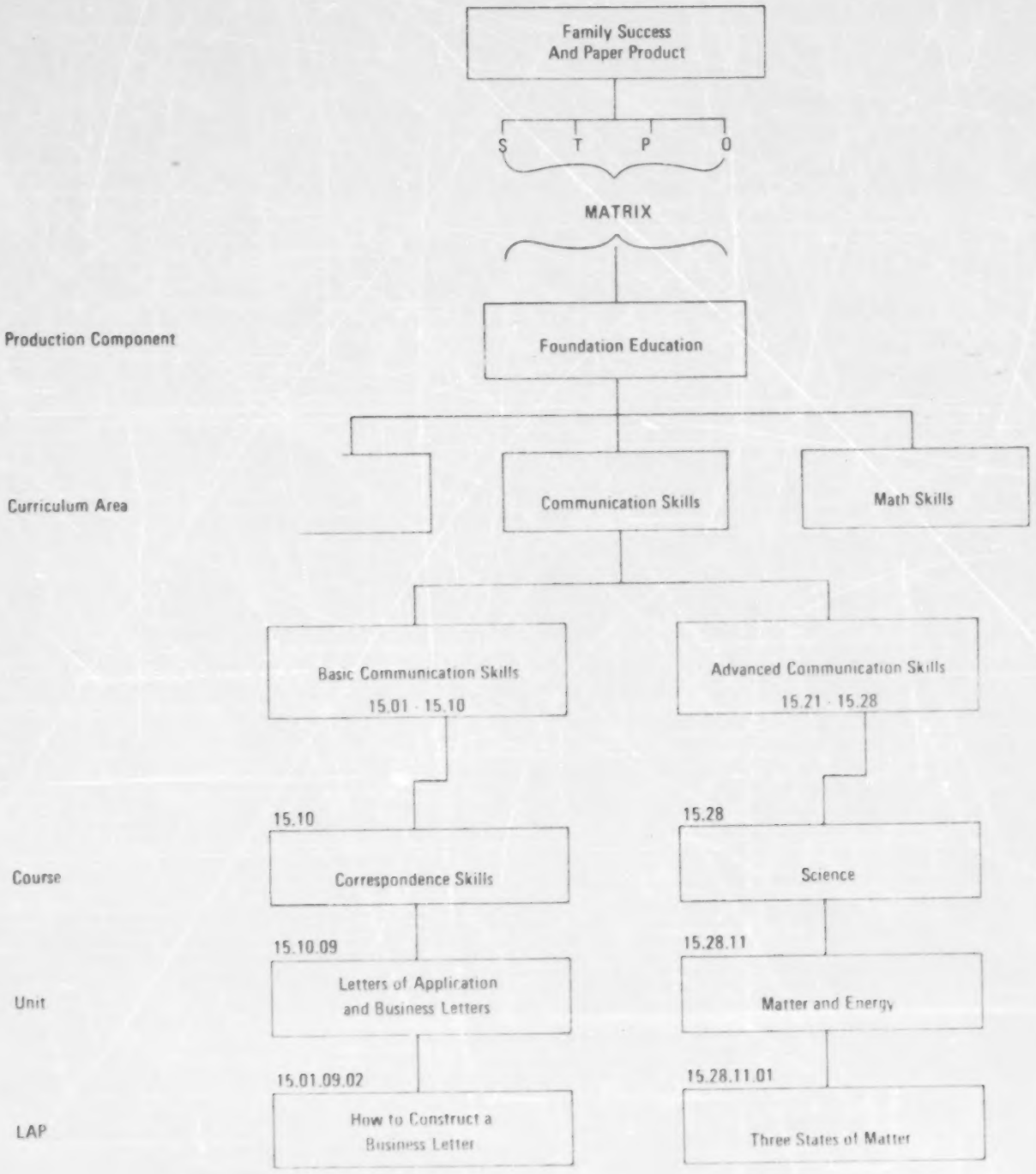

Family Success
And Paper Product
S T P O
MATRIX
Production Component
Foundation Education
Curriculum Area
Communication Skills
Math Skills
Basic Communication Skills
15.01 - 15.10
Advanced Communication Skills
15.21 - 15.28
15.10
Correspondence Skills
15.28
Science
Course
15.10.09
Letters of Application
and Business Letters
15.28.11
Matter and Energy
Unit
15.01.09.02
How to Construct a
Business Letter
15.28.11.01
Three States of Matter
LAP

Figure 5

CURRICULUM DEPARTMENT FUNCTION

This department has the responsibility of Devising, Defining and Implementing the total curriculum for the Mountain-Plains Project. Since the main interest in developing curriculum packages is to allow the material to be replicable and transportable, certain procedures and format must be followed. Some of these are presented for convenience and clarity. Please note that there may be some minor changes from previous examples. This is the result of synthesizing previous practices with subsequent experience. The intent of any change is to make any procedure more compatible with the system, and easier for the user. Within staff and time constraints, members of the department will be available to anyone having a need for their assistance.

TERMINOLOGY

LAPS

Learning Activity Package: The smallest component or subdivision of curriculum material that has:

1. stated outcome or lowest level of STPO and is relevant to a STPO at a higher level
2. stated procedure
3. performance criteria
4. measurement device
5. list of resources to provide learning experiences
6. resources attached where practicable

   Characteristics:

   a. is recorded on a standard form using standard format
   b. is produced in a manner which is understandable by the learner
   c. is individualized to the extent that the learner can proceed from one LAP to the next with a minimum of instructor assistance

UNITS

1. are logical groupings of LAPs by content
2. result in higher level of competence as indicated by high level objective
3. have LEGs and unit level tests
4. in some cases have two types of unit organization:

   a. those leading to courses for curriculum structure
   b. those leading to job title mastery or validation

COURSES

1. have logical content grouping of units
2. have LEGs, course level tests where applicable
3. result in higher level of competence as indicated by higher level objective

CURRICULUM

A group of related courses and/or job titles.

Characteristics

1. have cost-center-related numbers
2. are groups of related job titles (Career Preparation)
3. are groups of related courses
4. have comprehensive tests for:

   a. an entry-exit profile
   b. diagnostic program prescription

5. make up a production component

TERMINOLOGY (continued)

STPO (Student Terminal Performance Objective)

Mountain-Plains STPOs describe the behavior expected of the learner upon leaving the system.

Characteristics:

1. The achievement of an STPO is in terms of achieving its sub-objectives – except at the LAP level, which is directly measurable (e.g. Course objectives are satisfied in terms of meeting unit objectives)
2. A properly constructed STPO, whether in narrative or outline form, consists of four components:

    a. statement of observable terminal behavior
    b. conditions/constraints under which the behavior will occur
    c. criteria for successful behavior
    d. measurement device used to assess the behavior

3. STPOs identify purposes for which production components exist and are being held accountable
4. STPOs also form references against which summative evaluation will be measured
5. STPOs will be the basis for formative evaluation

FORMATIVE EVALUATION

The evaluative mechanism which yields information for changing or adjusting the system to improve its operation.

SUMMATIVE EVALUATION

The evaluation mechanism which indicates the extent to which the system has satisfied the purpose for which it exists.

PERFORMANCE ACTIVITY

An activity intended for the learner to experience which leads to mastery of an objective.

PROCEDURES FOR PROCESSING NEW AND UPDATING LEARNING ACTIVITY PACKAGES (LAPs) THROUGH THE CURRICULUM DEVELOPMENT PRODUCTION FLOW SYSTEM.

DEFINITIONS:

New LAP: A LAP that covers a new area, not a replacement LAP or an alternate LAP.

Replacement LAP: A LAP that has been rewritten and contains new or different materials; a revision that will completely replace an existing LAP; e.g., 37.02.01.01.A1 becomes 37.02.01.01.A2 wherever 37.02.01.01.A1 is deleted from the operational program.

Alternate LAP: A LAP written to be used in addition to an existing LAP, another version of the same LAP, one that uses different materials or a different method to attain the same objective; e.g., 15.07.06.01.A1, 15.07.06.01.B1, and 15.07.06.01.C1 all become part of the operational program. If one of the alternate LAPs should need to be replaced, the procedure for replacement LAPs should be followed: e.g., 15.07.06.01.B1 would be deleted and 15.07.06.01.B2 would take its place in the operational program.

PROCESSING STEPS:

1. For a New LAP

   a. If operational copies are needed before completion of the two week production flow system, the originator should make the number of copies needed for the two-week period. (Word Processing currently needs about this much time to get your LAPs back to you.) The originator also provides the Curriculum Department with a copy of the LAP, using the designed LAP worksheet form.

   b. When operational copies are not needed within two weeks, the originator simply provides curriculum with a copy of the LAP.

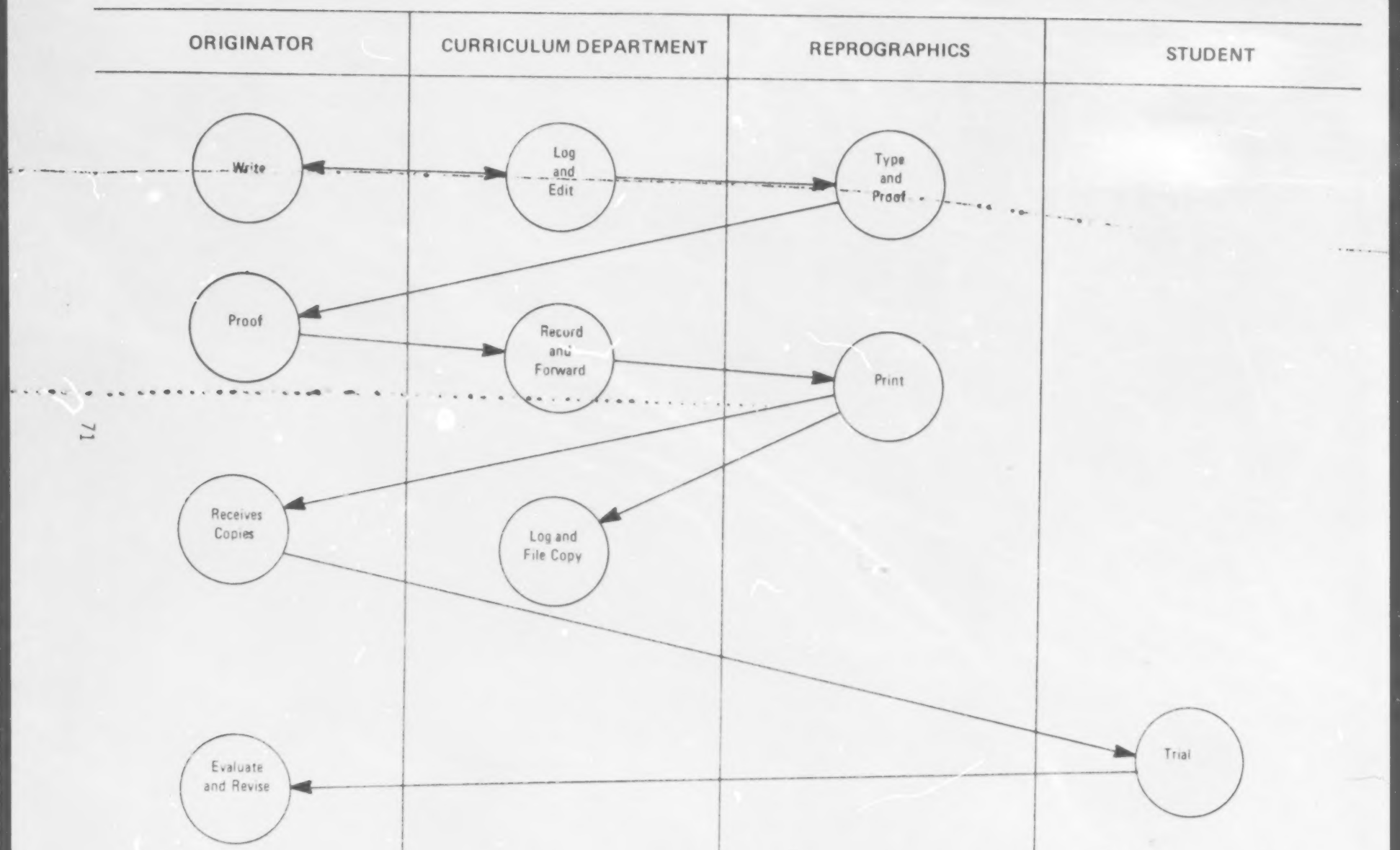
2. For a Replacement LAP

   The originator uses the designed LAP worksheet form and the processing steps for a new LAP, indicating on the form the change in the file code number as, e.g., A1 becomes A2 or B1 becomes B2.

3. For an Alternate LAP:

   The originator uses the designed LAP worksheet form and the processing steps for a new LAP, indicating on the form the correct file code number, e.g., B1, C1, D1, etc.

LAP AND LEG PRODUCTION FLOW CHART



LEARNING ACTIVITY PACKAGES

Directions for Producing

On the Learning Activity Package Worksheet, one needs to follow the suggested procedure. For further clarification, each item is explained.

1. Author – This is the name of the person who has designed this particular LAP.

2. Curriculum Area – Automotive, Office Education, etc.

3. Course – Could be Job Title – General Mechanic, Rough In, Accident Prevention, Small Engine Mechanic. There may be more than one course or job title for each core or instructional area.

4. Unit – There will be more than one unit for each course. Examples are: Fundamentals of Brake Systems, Excavation Layout, Concrete and Forms, Children's Safety, Appetizers, Letters of Appreciation.

5. Date – This is the date that Word Processing will use when typing the master copy.

6. Performance Activity – This is construed as being the title of the LAP. Emphasize here concise, brief, identifications of the contents of the LAP. Examples: Basic Brake Operations, Weighing and Measuring, Credit Problems, Three States of Matter.

7. Objective – Use here Mager's first two objective components. TERMINAL BEHAVIOR (what the learner will be doing) and the important CONDITIONS under which the behavior will occur. Items 7 and 8 may be combined if you wish.

8. Evaluation Procedure – Two things: 1) specify the CRITERIA of acceptable performance (how well the learner will have to perform to be considered acceptable) and 2) what measurement devices will be used to make this determination.

9. Resources – Texts, tools, materials, equipment, etc.

10. Procedure – These are the detailed steps a student takes in applying himself to the task of accomplishing whatever the above items assign to him. An example of a completed LAP appears in Figure 6. It should be emphasized that the steps should be such that the student can follow them without assistance, to the conclusion mandated by the objective. Unusual situations will be the exception.

File Code: 37.04.02.05 A2-0

Date Published: 8-7-74

Mountain-Plains Education & Economic Development Program, Inc.
Glasgow AFB, Montana 59231

Learning Activity Package

Student: _____

Date: _____

PERFORMANCE ACTIVITY: Cleaning & Inspecting Wheel Bearings

OBJECTIVE:

Identify the procedure for removing, cleaning, inspecting, repacking, installing and adjusting the front wheel bearings. Remove, clean, inspect, repack, and install a set of wheel bearings.

EVALUATION PROCEDURE:

80% correct on performance checklist.
LAP test after doing LAP 37.04.02.06

RESOURCES:

Automobile needing bearing service
Jack and safety stands
Bearing grease
Hand tools
Service Manual

PROCEDURE:

1. Lift the front of the car with a floor jack until the wheels clear the floor and put safety stands under the car.
2. Remove the spindle nut and outer wheel bearing. NOTE: After the nut is removed, hit the side of the tire at the top to cause the thrust washer and bearing to come loose.
3. Remove the wheel and hub assembly from the spindle by lifting up and pulling on the wheel. NOTE: Be careful not to damage brake shoes as the drum is pulled off.
4. Remove the dirt from the brake assembly and from inside the brake drum with an air blast.
5. Wipe the spindle clean with a shop cloth. CAUTION: Do not get grease on the brake shoes or inside the brake drum.
6. Wipe the inside of the hub and races clean with a shop cloth and wash the bearings in solvent and blow dry with compressed air. NOTE: Do not spin bearings with air.
7. Inspect bearings and races for nicks, burrs, pits and overheating. NOTE: If bearings look bad, they should be replaced. Check with instructor.
8. Check the races inside the hub, making sure they are tightly in place.
9. Repack the bearings using a wheel bearing packer and put a very light coat of fresh bearing grease on the races.

Principal Author(s): J. Anderson/W. Osland

10. Install inside seal and bearing by using a seal driver. NOTE: Check brake drum to be sure there is no grease on it.
11. Push drum and wheel over the spindle and brake shoes. NOTE: Be careful not to damage the brake shoes.
12. Install outer wheel bearing, thrust washer and nut. NOTE: Be sure that the small end of bearing is to the inside.
13. Tighten nut until there is no side play. NOTE: Tighten to specified pressure using a torque wrench.
14. Spin the wheel to be sure it turns freely. NOTE: Check with your instructor.
15. Install new cotter pin by bending the long prong around the nut.
16. Replace dust cover and hub cap.
17. Upon completion of the LAP, proceed to the next LAP.

THE STUDENT PROGRESS RECORD (SPR) AND STUDENT WORK PLAN (SWP)

A. Student Progress Record

These enable the student to keep track of his progress through various Curriculum Areas. He has one for each Job Title if in a career preparation class, and one for each other Curriculum Area.

Customarily, students manipulate the record, making appropriate entries and filing the form when not in use. In some cases, instructors prefer to do this so the Student Progress Record doesn't get lost or mutilated.

B. Student Work Plan

Student Work Plans are used to provide periodic information to others about the student's progression through his learning sequence.

Printed on carbonless multiple copy paper, Student Work Plans are removed at six week intervals for use by student advisors so that students can be scheduled appropriately in accordance with their progress.

STUDENT NUMBER _____

STUDENT WORK PLAN

10/1/74

Name _____

Rater _____

Date *(Entry)* _____ *(Exit)* _____

KEY FOR FILLING OUT RIGHT HAND PARENTHESES:
(V) Unit prevalidated on pretest indicated by entering a "V" in the parentheses following unit code.
( ) For Completed Units enter total hours from SPR "Time Spent . . ." in the parentheses.
( ) For Incomplete Units enter total hours for completed LAP's from from SPR "Time Spent . . ." at the immediate right of the parenthesis

Instructional or Curriculum Area 37. AUTO AIR CONDITIONING	Comprehensive Written Test PRE	Comprehensive Written Test POST	Performance Check List PRE	Performance Check List POST	Attitude Check List PRE	Attitude Check List POST	Other Specify PRE	Other Specify POST	COURSE UNITS NEEDED	Est. Time / Act. Time
Objectives: The student will demonstrate knowledge, acceptance, participation, appropriate work relations, job roles and responsibilities.										
The student will practice accident prevention techniques.	12 15		3 3						(10) 01.01 ( )	
The student will demonstrate mastery of cogantive skills.	88 110								(20) 05.01 ( ) (10) 11.05 ( ) (10) 12.03 ( ) (5) 11.01 ( ) (20) 11.06 ( ) (5) 13.07 ( ) (25) 11.02 ( ) (40) 11.07 ( ) (5) 13.08 ( ) (10) 11.03 ( ) (5) 12.01 ( ) (10) 11.04 ( ) (5) 12.02 ( )	
The student will demonstrate skill application.			100 100						(5) 02.01 ( ) (5) 02.02 ( ) (5) 02.03 ( )	
The student will demonstrate familiarity with and competence in, the use of tools, equipment and/or materials.	27 34		6 6							
TOTALS									JOB TITLE HOURS 235 ADJUSTED JTH ADJUSTED SUPPORT HOURS TOTAL ADJUSTED HOURS	Total Est. Time Total Act. Time

FOR PLANNER USE

89

76

EY:

Actual Score / Possible Test Score
Score Necessary to Prevalidate / Possible Test Score

88

PRETEST	POST TEST
	% Change

FOR DATA MONITOR USE

STUDENT PROGRESS RECORD

10/1/74

Name _____ Number _____ Entry Date _____

Curriculum Area 37 AUTOMOTIVE Pretest Date _____

JOB TITLE: Auto Air Conditioning Post Test Date _____

		Time Spent in Curric. Compon.	Date Started	Date Completed	Instructor's Initials		
.01	Automotive Shop Safety						
	Pretest Score Post Test Score						
.01	Shop Safety						
	Pretest Post Test Perf. Test						
.01	Fundamentals of Shop Safety						
.02	Safety with Tools						
.03	First Aid						
.04	Shop Safety Observation						
.02	Tools and Equipment						
	Pretest Score Post Test Score						
.01	Basic Tools						
	Pretest Post Test Perf. Test						
.01	Hand Tool Fundamentals						
.02	Hand Tool Practice						
.02	Special Tools						
	Pretest Post Test Perf. Test						
.01	Precision Measuring Tools Fundamentals						
.02	Precision Measuring Tools Practice						
.03	Fasteners and Torque Wrench						
.03	Shop Equipment						
	Pretest Post Test Perf. Test						
.01	Shop Equipment Fundamentals						
.02	Jacks and Lifts Practice						
.03	Presses and Pullers Practice						
.04	Toolroom Observation						
05	Electrical Systems						
	Pretest Score Post Test Score						
.01	Fundamentals of Electrical Systems						
	Pretest Post Test Perf. Test						
.11	Auto Air Conditioning						
	Pretest Score Post Test Score						
.01	Safety						
	Pretest Post Test Perf. Test						
.01	Safety Precautions						
.02	Theory of Operation						
	Pretest Post Test Perf. Test						

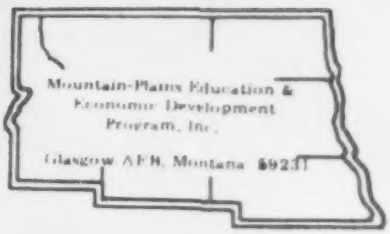
LEARNING EXPERIENCE GUIDES (LEGs)

These are designed to give the viewer a capsule look at the contents of the course, curriculum area or unit he is viewing. A student or instructor can see from the Course LEG what is contained in any course without detailed examination of course material.

LEGs may be used at curriculum area, course or unit levels in the curriculum sequence; it is suggested that the author make the LEG readable by students as well as instructors where practical. LEGs are also one of the best sources of information for persons from other schools and institutions to quickly determine the contents and usefulness of these curriculum products.

File Code: _____

Date Published _____



Learning Experience Guide

CURRICULUM AREA: _____

DESCRIPTION:

Tells what the area is about, describes the curriculum content and specifies the characteristics of that content.

RATIONALE:

What the curriculum area will do for the student and how he will benefit from it.

OBJECTIVES:

These should be the same format as for LAPs. They should encompass, however, a broader scope being of a higher order. An attempt should be made to include at least samples of typical course objectives.

GENERAL INSTUCTIONS:

Include here any information which might be useful to students, instructors and others who might use this guide.

COURSE TITLES:

This is a list of all courses in this Curriculum Area.

EVALUATION PROCEDURE:

How the student is evaluated to determine achievement of the Curriculum Area objectives - kinds of tests, performance criteria, etc.

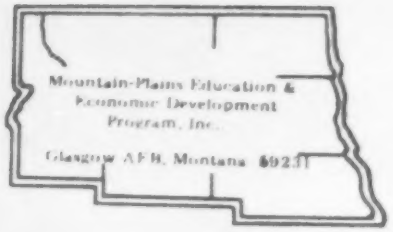
FOLLOW-THROUGH:

This section may be used for the instructions to students, instructors or others.

Principal Author(s):

File Code: _____

Date Published: _____



Learning Experience Guide

COURSE: _____

DESCRIPTION:

Tells what the course is about and describes the content and its characteristics.

RATIONALE:

What the course will do for the student.

OBJECTIVES:

These should be the same format as for LAPs. They should encompass, however, a broader scope being of a higher order. An attempt should be made to include at least samples of typical unit objectives.

PREREQUISITES:

These are the knowledges and performance capabilities necessary for entrance into the course. Avoid specific grade levels unless coded.

RESOURCES:

Printed materials, audio-visuals and equipment to be used in accomplishing the objectives. In the course guide only the primary resources to be used are reported. Resources are listed alphabetically by title into the following three categories:

Printed Materials:
The following information arranged as given is reported for printed materials. Titles are underlined.

Title, author, publisher, year

Audio Visuals:
The information given for audio-visual resources is as follows:

Title, author, publisher, year
(Kind of audio-visual) When listing multi-media resources that have several kinds of components to be used together, list each by title in the appropriate category and make a cross reference statement following the resource entry like: "See title in Printed Materials".

Principal Author(s):

RESOURCES: (continued)

Equipment:
That which a school or institution would find necessary to adequately conduct the course - could include such items as:

Line border
Study carrels
16 mm projector

GENERAL INSTRUCTIONS:

Same as for Curriculum Area - LEG

UNIT TITLES:

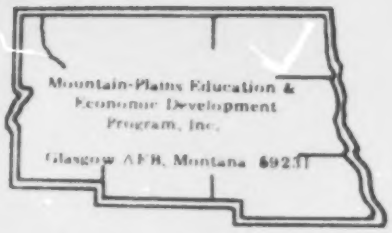
A listing of all units included in this particular course.

FOLLOW-THROUGH:

Same as for Curriculum Area - LEG

File Code: _____

Date Published: _____



Learning Experience Guide

UNIT: _____

RATIONALE:

How the unit will benefit the student when completed. It will tell what unit achievement will do for the student.

PREREQUISITES:

Same as for Course LEG.

OBJECTIVES:

These should be the same format as for LAPs. They should encompass, however, a broader scope being of a higher order. An attempt should be made to include at least samples of typical LAP objectives.

RESOURCES:

In the Unit LEG are listed only those printed materials, audio-visuals and equipment used to accomplish the performance objectives for the unit. Resources are listed alphabetically by title into the following three categories:

Printed Materials:
The printed material resources are identified as follows with titles underlined:

Title, author, publisher, year

Audio-Visuals:
The audio-visual resources are identified as follows with titles underlined:

Title, author, publisher, year, (kind of audio-visual)
Multi-media resources with components that are used together are each listed by title in the appropriate category and a cross reference statement follows the resource entry like: "See title in Printed Materials".

Equipment:
Same as for Course LEG.

GENERAL INSTRUCTIONS:

Specify and explain the procedures that are to be followed by students within this unit.

Principal Author(s):

PERFORMANCE ACTIVITIES:

A list of all the performance activities for this unit.

EVALUATION PROCEDURE:

Procedure used to determine student achievement of the stated unit objectives.

FOLLOW-THROUGH:

The next step that the student is to do after reading this unit guide.

PROCEDURES FOR CURRICULUM DEVELOPMENT

Procedural development steps - these are the general procedures to be followed in establishing your curriculum. Even though listed in a particular order for the sake of easy reference, the steps in reality may not follow this sequence. (Item 2 may come before Item 1).

1. Curriculum Area
   a. Identify Courses
   b. Identify Units
   A curriculum worksheet (See Forms) should be submitted to the Curriculum Department after identification of courses and units.

2. Performance Activities (stated as objectives)
   a. Identify Them
   b. Assign Them to Units
   When the PAs for a course have been identified and assigned to units, submit a complete list of those PAs to the Curriculum Department.

3. Evaluation Techniques
   At this point, construction of evaluation procedures to measure the degree of success in meeting the performance activity objective (PO) saves total development time.

4. Construct a LAP or LAPs for each Performance Activity
   There is a LAP Worksheet that should be used when possible for LAP drafts submitted to the Curriculum Department.

5. Prepare LEGs for Units
   There is a LEG Worksheet to be used when possible for LEG drafts.

6. Prepare LEGs for Courses

7. Prepare LEGs for Curriculum Area Where Deemed Necessary

Curriculum Change

When there is a necessity for Curriculum change, use the Course/Unit/Occupational Requirement Changes Form to report the proposal.

Curriculum Product Routing Slip Procedure

The routing process is used to maintain control and timely processing of Curriculum Products, The Routing Slip is initiated by the Curriculum Department upon receipt of curriculum product. A sample form of the Routing Slip is displayed in the form section. The curriculum product is reviewed and edited by the Curriculum Department. It is either sent back to the originator or to Word Processing for typing. The originator will always return the product to the Curriculum Department. At each routing step, upon receipt of the curriculum product, the receiving date should be filled in.

Before the product is sent on to the next routing step, the "completed by (initials)" column should be initialed. On routing step line 5, the originator should indicate the number of printed copies that are desired when finally sent to Reprographics.

NOTE: If minor corrections are to be made on curriculum products that have been typed by Word Processing, make them in pencil on the side margins to speed up the correction time by Word Processing.

EVALUATION

Briefly, evaluation takes place primarily at the LAP and Unit level. Here is where the curriculum interfaces with students; this is also where nearly all test items are derived. In fact, it can be concluded with minor reservation, that any test items which may appear in the curriculum sequence at a higher than Unit level, are essentially little more than a compilation of already-stated test items at a subordinate level (Unit and LAP Levels). Further, it can be concluded that the adequacy of a curriculum sequence is tested by the capability of the sequence to bring students to a STPO level of performance. It should be further stated that STPOs are a translation of the mission statements into Behavioral Objectives which will be observed in the student at the time he leaves the immediate influence of the Center. These STPOs are identified, as are their place in the Mountain-Plains Scheme. They, in effect, offer themselves as guides to the Curriculum Sequence, and are fed into this sequence through a matrix to the various Production Components which head the Curriculum Sequence. (See Figure 6).

As stated in Volume II, Research Design, the establishment of relationships between STPOs at the top of the sequence, and LAPs and Units at the bottom of the sequence are germane to the Evaluation Process.

Following this design, satisfactory accomplishment of objectives at such levels as Courses and Job Titles, could be tested and validated by inference, provided that Unit and/or LEP test items (objectives) are accomplished.

On-Site – Ongoing Evaluation concerns, for the most part, three things:

A. Pretest – How does the student perform when he begins a learning sequence?
B. Post Test – What significant change has taken place in his behavior as a result of his learning experience? What LAP and Unit objectives has he attained?
C. Diagnostic – What of the LAPs and Units offered does he need to accomplish his academic, occupational or personal objectives?

This evaluation also measured the effectiveness of the learning experiences in the Curriculum Sequence, and points up time lags, irrelevancies and other problems.

CURRICULUM PRODUCT CHANGES

Purpose:

A Curriculum Routing Change form is completed to request a course, unit or occupational requirement change in the implemented curriculum.

Guidelines for Use:

A change desired for the implemented curriculum is identified and justified on the curriculum change form. Applicable drafts of curriculum products are attached. The Senior Instructor and Educational Services Director sign the request and forward it to the Curriculum Department. When the request is received, the Curriculum Department staff reviews it and after concurrance coordinates necessary action and establishes an implementation date for the changes.

CURRICULUM CHANGE ROUTING FORM

TYPE OF CHANGE:

DATE _____

COURSE	___	LEG	___
UNIT	___	TEST	___
LAP	___	MATRIX	___
SWP	___	STPO	___
SPR	___	OTHER	___

CHANGE CATEGORY (Check One)

___ NEW
___ REPLACEMENT
___ ALTERNATE
___ OTHER

ORIGINATOR

_____
TITLE - CURRICULUM AREA

1. Identify proposed change in detail: *(Attach supporting information; curriculum number, example, etc.)*

2. State reason for request, including substantiating data:

3. How will proposed change meet the needs identified in 2 above?

ACTION AND RECOMMENDATIONS:

RESEARCH SERVICES/CURRICULUM _____

_____

EDUCATIONAL SERVICES DIVISION: _____

_____

FINAL DISPOSITION: _____

_____

CURRICULUM WORKSHEET

Purpose:

The Curriculum Worksheet is used to list the courses and units for a curriculum area. It also is used to relate such things as occupation, job titles, types of students, occupational clusters, etc., to the Curriculum Area courses and units.

Guideline for Use:

The Curriculum Area title and number are recorded in the upper left corner block. Each vertical column is identified as a unit by title and number as shown in the illustration. Each group of units in a course are identified by title and number as shown across the top of the illustration. The horizontal lines are used to denote various things. In occupational preparation curriculum areas it may list the occupational titles or clusters. The matrix so formed may then be marked to show units required by each occupational title or cluster. If particular occupational training requires training outside of the named curriculum area, the name and number of the curriculum area(s) providing the support are recorded as shown in the illustration.

CURRICULUM WORKSHEET

CURRICULUM AREA (00)	.01 COURSE							.02 COURSE											.03 COURSE								SUPPORT					
DATE	.01 UNIT	.02 UNIT	.03 UNIT	.04 UNIT	.05 UNIT	.06 UNIT		.01 UNIT	.02 UNIT	.03 UNIT	.04 UNIT	.05 UNIT	.06 UNIT	.07 UNIT	.08 UNIT	.09 UNIT	.10 UNIT	.11 UNIT	.01 UNIT	.02 UNIT	.03 UNIT	.04 UNIT	.05 UNIT	.06 UNIT	.07 UNIT	.08 UNIT	(00) CURRICULUM AREA	(00) CURRICULUM AREA	(00) CURRICULUM AREA	(00) CURRICULUM AREA		
1. OCCUPATION																																
2. JOB TITLES																																
3. TYPES OF STUDENT																																
4. OCC. CLUSTERS																																
5. ETC.																																
6.																																
7.																																
8.																																
9.																																
10.																																
11.																																
12.																																
13.																																
14.																																
15.																																
16.																																
17.																																

06

ROUTING SLIP

Purpose:

The Routing Slip is used to assist in the control and timely processing of curriculum products.

Guideline for Use:

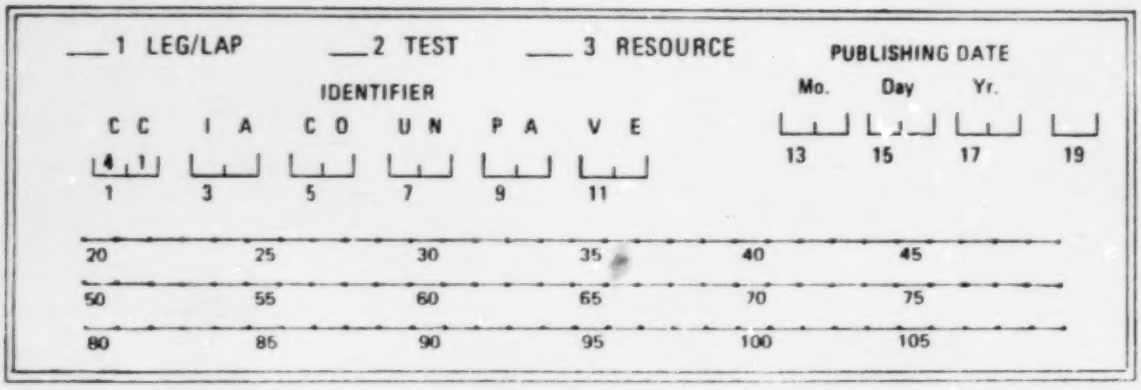
The Routing Slip for curriculum products is prepared by the Curriculum staff and attached to each product that is received. The curriculum product is reviewed and edited by the Curriculum Department. It is either sent back to the originator or to Word Processing for typing. An originator will always return the product to the Curriculum Department. At each routing step, upon receipt of the Curriculum product, the receiving date is to be filled in. Curriculum assigns suspense dates for each routing step. Before the product is sent on to the next routing step, the "completed by (initials)" column should be initialed. The number of printed copies is recorded on Line 5 of the routing slip. The routing slip is then used for keypunching.

Routing Slip
Curriculum Products

AUTHOR _____

PHONE _____

ORIGINATING DEPARTMENT _____ BUILDING NUMBER _____


___1 LEG/LAP
___2 TEST
___ 3 RESOURCE
PUBLISHING DATE
Mo. Day Yr.
IDENTIFIER
C C I A C O U N P A V E
4 1
1 3 5 7 9 11
13 15 17 19
20 25 30 35 40 45
50 55 60 65 70 75
80 85 90 95 100 105

ROUTING STEPS	RECEIVING DEPARTMENT	RECEIVING DATE	Completed by (Initials)	SUSPENSE DATE
1.	CURRICULUM			
2.	ORIGINATOR			
3.	CURRICULUM			
	Approved for production by: _____			
4.	WORD PROCESSING *(If further commentary with Curriculum is needed, note reason: i.e., not legible, unclear, etc.)* Comments			
	Proofread by: _____			
5.	REPRODUCTION: Send master and _____ copies to the originator. Send 2 copies and this form to curriculum COST CENTER			

COMMENTS:

INITIATION OF AN AUDIO-VISUAL CURRICULUM PRODUCT

Purpose:

An Initiation of an Audio-Visual Curriculum Product form is used to make A-V curriculum products development proposals to the Curriculum Department.

Guidelines for Use:

The Senior Instructor submits an Initiation of Audio-Visual Curriculum Product proposal by completing the form that includes the concisely but thoroughly answering of four questions.

INITIATION OF AUDIO-VISUAL CURRICULUM

TO: Curriculum Department
Research Services Division

FROM: _____
(name)

1. Area in which the problem exists:

   (A) Instructional Area Code Number ___
   (B) Course Number ___
   (C) Unit Number ___
   (D) P.A. Number ___

2. What is the specific problem?

3. What do you consider to be the alternative solution(s) to this problem?

4. What result do you wish to achieve?

5. Why do you think this result can best be achieved through Audio-Visual product?

Senior Instructor: _____

Date: _____